

CITY COUNCIL AGENDA ITEM COVER MEMO

Agenda Item Number _____

Meeting Type: Regular

Meeting Date: 4/10/2014

Action Requested By:
Engineering

Agenda Item Type
Resolution

Subject Matter:

Agreement with Garver, L.L.C.

Exact Wording for the Agenda:

Resolution authorizing the Mayor to enter into an agreement with Garver, L.L.C. for Engineering Design Services for Zierdt Road Improvements, Project No. 65-06-RD01 & STPHV-8507(600)

Note: If amendment, please state title and number of the original

Item to be considered for: Action

Unanimous Consent Required: No

Briefly state why the action is required; why it is recommended; what Council action will provide, allow and accomplish and; any other information that might be helpful.

Engineering services contract to prepare the roadway contract plans assembly for constructing Zierdt Road northbound lanes as a stand-alone project. This project will be the first of four (4) separately planned phases of road construction for the Zierdt Road and associated intersection upgrades to be started as acquisition is completed. Design services in a lump sum total contract amount of \$210,436.00. Account No. 23-6500-0813-8120

Associated Cost: \$210,436.00

Budgeted Item: Select...

MAYOR RECOMMENDS OR CONCURS: Select...

Department Head: Kathy Morris

Date: 4/7/14

revised 3/12/2012

ROUTING SLIP CONTRACTS AND AGREEMENTS

Originating Department: **Engineering**

Council Meeting Date: **4/10/2014**

Department Contact: **Lynn Majors**

Phone # **256-427-5201**

Contract or Agreement: **Engineering Design Services**

Document Name: **Garver-Zierdt Road Project No. 65-06-RD01 & STPHV-8507**

City Obligation Amount: **\$210,436.00**

Total Project Budget: **\$210,436.00**

Uncommitted Account Balance: **0**

Account Number: **23-6500-0813-8120**

Procurement Agreements

<u>Not Applicable</u>	<u>Not Applicable</u>
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Grant-Funded Agreements

<u>Not Applicable</u>	Grant Name:
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Department	Signature	Date
1) Originating	<i>Lynn Majors</i>	4/7/14
2) Legal		
3) Finance		
4) Originating		
5) Copy Distribution		
a. Mayor's office (1 copies)		
b. Clerk-Treasurer (Original & 2 copies)		

RESOLUTION NO. 14-

BE IT RESOLVED by the City Council of the City of Huntsville, Alabama, that the Mayor be, and is hereby authorized, to enter into an agreement with Garver, L.L.C. in the amount of TWO HUNDRED TEN THOUSAND FOUR HUNDRED THIRTY-SIX AND NO/100 DOLLARS (\$210,436.00) for Engineering Design Services for Zierdt Road Improvements, Project No. 65-06-RD01 & STPHV-8507(600), in Huntsville, Alabama, on behalf of the City of Huntsville, a municipal corporation in the State of Alabama, which said agreement is substantially in words and figures similar to that document attached hereto and identified as "Agreement between City of Huntsville and Garver, L.L.C. for Engineering Design Services for Zierdt Road Improvements, Project No. 65-06-RD01 & STPHV-8507(600)" consisting of a total of nineteen (19) pages plus forty-one (41) additional pages consisting of Attachments 1-16, and the date of April 10, 2014, appearing on the margin of the first page, together with the signature of the President or President Pro Tem of the City Council, and an executed copy of said document being permanently kept on file in the Office of the City Clerk of the City of Huntsville, Alabama.

ADOPTED this the 10th day of April, 2014.

President of the City Council of
the City of Huntsville, Alabama

APPROVED this the 10th day of April, 2014.

Mayor of the City of Huntsville,
Alabama

AGREEMENT BETWEEN
CITY OF HUNTSVILLE, ALABAMA
AND
GARVER, L.L.C.
FOR
ENGINEERING DESIGN SERVICES

FOR
ZIERDT ROAD IMPROVEMENTS

Project I.D Number 65-06-RD01 & STPHV-8507(600)
April 10, 2014

**_____
President of the City Council of the City of
Huntsville, AL
Date: April 10, 2014**

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**AGREEMENT BETWEEN
CITY OF HUNTSVILLE, ALABAMA
AND
GARVER, L.L.C.
FOR
ENGINEERING DESIGN SERVICES
FOR
ZIERDT ROAD IMPROVEMENTS
Project I.D Number 65-06-RD01 & STPHV-8507(600)**

THIS AGREEMENT made as of the 10th day of April in the year 2014, by and between the CITY OF HUNTSVILLE, ALABAMA (hereinafter called OWNER), and GARVER, L.L.C., (hereinafter called ENGINEER).

WITNESSETH, for the considerations hereinafter set forth, the parties hereto agree as follows:

ARTICLE 1 - ENGAGEMENT OF THE ENGINEER

The OWNER hereby engages the ENGINEER, and the ENGINEER hereby accepts the engagement to provide general engineering and consultation as a representative of the OWNER to include the following:

- 1.1 Professional engineering services for design of Zierdt Road Improvements, as further described in ARTICLE 2, and hereinafter called PROJECT.
- 1.2 By executing this Agreement, the ENGINEER represents to the OWNER that the ENGINEER is a professional qualified to act as the ENGINEER for the PROJECT and is licensed and certified to practice engineering by all public entities having jurisdiction over the ENGINEER and the PROJECT. The ENGINEER further represents to the OWNER that the ENGINEER will maintain all necessary licenses, certifications, permits or other authorizations necessary to act as ENGINEER for the PROJECT until the ENGINEER's remaining duties hereunder have been satisfied. The ENGINEER shall assign only qualified personnel to perform any service concerning the PROJECT. All services rendered by the ENGINEER for the PROJECT shall be performed by or under the immediate supervision of experienced and qualified professionals licensed, certified, and registered as appropriate in the State of Alabama possessing the expertise in the discipline of the service being rendered. The ENGINEER assumes full responsibility to the OWNER for the negligent acts, errors and omissions of its consultants or others employed or retained by the ENGINEER in connection with the PROJECT.
- 1.3 Execution of this Agreement by the ENGINEER constitutes a representation that the ENGINEER has become familiar with the PROJECT site and the local conditions under which the PROJECT is to be implemented. The ENGINEER agrees to provide all necessary engineering services required to professionally accomplish the ENGINEER's defined scope of services.

ARTICLE 2 – DESIGN SERVICES OF THE ENGINEER

- 2.1** ENGINEER shall provide for OWNER professional engineering services for design of Zierdt Road Improvements.
- 2.2** These services shall include consultation and advice; customary civil, structural, mechanical and electrical engineering design services; and Architectural services incidental thereto, as outlined herein and further described in the SCOPE OF SERVICES, ATTACHMENT 1.
- 2.3** Upon the OWNERS authorization, the ENGINEER shall prepare construction documents consisting of drawings and specifications setting forth in detail the requirements for construction of the PROJECT. The ENGINEER warrants that such construction documents are accurate, coordinated and adequate for the construction and in conformity and comply with applicable laws, codes and regulations. Products specified for use shall be readily available unless written authorization to the contrary is given by the OWNER. Products or materials specified by the ENGINEER that are available from only one source shall be justified in writing by the ENGINEER in order to meet applicable federal, state, or local procurement or bid requirements.
- 2.4** The ENGINEER shall prepare appropriate bid alternates as necessary in order to assure that the PROJECT can be awarded within the PROJECT budget limitations.
- 2.5** The ENGINEER shall serve as the OWNER's professional representative in those portions of the PROJECT to which this Agreement applies and shall consult with and advise the OWNER during the performance of these services.
- 2.6** The ENGINEER shall incorporate into its design, and into its final work products, the requirements contained within the OWNER's engineering standards, standard specifications, and design manuals referenced in ATTACHMENT 3. The requirements of the State of Alabama Department of Transportation design standards shall be reviewed for applicability and incorporated into portions of the work where joint participation between the OWNER and the State is applicable. When conflicts are noted between the OWNERS requirements and standards of others, the OWNERS standards shall take precedent. Discrepancies shall be brought to the attention of the OWNER. Deviations from OWNER's requirements shall be identified to the OWNER by the ENGINEER in writing prior to incorporating the changes.
- 2.7** The ENGINEER shall obtain all Planning Commission approvals with regard to location, character and extent, as required.
- 2.8** The ENGINEER shall obtain a Utility Project Notification Form (Attachment 10) from all affected utilities on the project by the 60% design review stage. Acceptance shall be provided as a signed original by all affected parties at the 90% design review stage.
- 2.9** The ENGINEER shall promptly correct, or have corrected, any errors, omissions, deficiencies or conflicts in the ENGINEER's work product or that of his sub-contractors/sub-consultants, without additional compensation for time, reproduction or distribution.
- 2.10** During the process of design and preparation of the construction documents, the ENGINEER shall review with the OWNER the construction documents, the estimate of probable construction cost, schedule, and other design services issues. Such review shall be, at a minimum, as outlined in ATTACHMENT 4 as 0%, 30%, 60%, and 90% completion stage. Following such reviews, the ENGINEER shall make any appropriate revisions thereto to assure compliance with the OWNER's requirements.
- 2.11** Field surveying work is required and shall be performed in accordance with "Standards of Practice for Surveying in the State of Alabama" as required by the Alabama Board of

Registration for Engineering and Land Surveyors. Surveying shall include P.K. Nails or other permanent stationing markings as well as staking of right-of-way, easements and parcels of land acquired by the City of Huntsville. Property corners shall be set at the new right-of-way. Easements shall be staked as requested by the City of Huntsville. The above field work shall be performed as a minimum as needed at the time of right-of-way acquisition and one additional time near the 100% submittal stage as determined by the OWNER. The cost for these services is included in the fees for Basic Services.

Survey data shall be based on a US Public Land Survey System corner or quarter corner. Said corner or quarter corner shall be field verified by the surveyor and a state plane coordinate provided in deliverables submitted to the City of Huntsville. All survey work shall be based on the following datum's:

Coordinate System:	US State Plane
Zone:	Alabama East 0101
Vertical Datum:	The North American Vertical Datum of 1988 (NAVD 88)
Horizontal Datum:	The North American Datum of 1983 (NAD 83)
Geoid Model:	Geoid03
Units:	US Survey Feet

- 2.12 The ENGINEER shall comply with the City of Huntsville Tree Ordinance and carry the requirements referenced therein with deliverables (drawings, specifications, etc.) in accordance with Section 27-57 of the City of Huntsville Code of Ordinances (Ord. No. 04-45, §13, 2-12-2004).
- 2.13 The ENGINEER shall prepare the prebid agenda after obtaining comments from stakeholders such as affected utilities, City of Huntsville Construction Project Engineer and Inspector(s), and other City of Huntsville departments as applicable. The ENGINEER shall moderate the prebid meeting, prepare meeting minutes, make clarifications, prepare addendums, and distribute to bidders.
- 2.14 A valid City of Huntsville license shall be maintained throughout the term of this contract. Additionally, the engineering firm shall be required to obtain and pay for all other federal, state or local permits, licenses, and fees which may be necessary or required in order to perform the work detailed herein.

ARTICLE 3 - CONSTRUCTION ADMINISTRATION SERVICES

OMITTED

ARTICLE 4 - ADDITIONAL SERVICES

The following services of the ENGINEER are not included in Article 2. Nevertheless, the ENGINEER shall provide such services if authorized in writing by the OWNER, and they shall be paid for by the OWNER as provided in Article 7, unless otherwise noted.

- 4.1 Making revision in drawings, specifications or other documents when such revisions are inconsistent with written direction by the OWNER previously given, are required by the enactment of revision of codes, laws or regulations subsequent to the preparation of such documents and not reasonably anticipated, or are due to other causes not within the control or responsibility of the ENGINEER, either in whole or in part.
- 4.2 Preparing drawings, specifications and supporting data in connection with change orders, provided that such change orders are issued by the OWNER due to causes not within the

control or responsibility of the ENGINEER, either in whole or in part.

- 4.3 Providing additional services for repair or replacement of work damaged by acts of God or other cause during construction provided that such services are required by causes not the responsibility of the ENGINEER, either in whole or in part.
- 4.4 Providing services not otherwise required herein which are made necessary solely by the default of the ENGINEER or major defects or deficiencies in the work of the ENGINEER. These services shall be provided with no increase in the contract amount and will not be compensable on an hourly basis.
- 4.5 Providing expert witness services and other services arising out of claims.
- 4.6 Provide services to stake site during construction.

ARTICLE 5 - RESPONSIBILITIES OF OWNER

The OWNER, without cost to the ENGINEER, will perform the following in a timely manner so as not to delay the services of the ENGINEER:

- 5.1 Assist ENGINEER by placing at ENGINEER's disposal all available information pertinent to the PROJECT including previous reports and any other data relative to design or construction of the PROJECT.
- 5.2 Provide all criteria and full information as to OWNER's requirements for the PROJECT, including design objectives and constraints, space, capacity and performance requirements, flexibility and expendability, and any budgetary limitations. The OWNER shall also furnish copies of all design and construction standards, which OWNER will require to be included in the drawings and specifications.
- 5.3 Assist the ENGINEER as necessary in acquiring access to and making all provisions for the ENGINEER to enter upon public and private lands as required for the ENGINEER to perform the work under this agreement.
- 5.4 Designate in writing a person to act as the OWNER's representative with respect to the work to be performed under this Agreement, such person to have complete authority to transmit instructions, receive information, interpret and define the OWNER's policies and decision with respect to materials, equipment elements and systems pertinent to the work covered by this Agreement. Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by ENGINEER, obtain advice of an attorney, insurance counselor and other consultants as OWNER determines appropriate for such examination and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of ENGINEER.
- 5.5 When requested by the ENGINEER, the OWNER will intercede on the ENGINEER's behalf when data from, or reviewed by third parties is not on schedule through no fault of the ENGINEER
- 5.6 The OWNER's review of any documents prepared by the ENGINEER or its consultants shall be solely for the purpose of determining whether such documents are generally consistent with the OWNER's intent. No review of such documents shall relieve the ENGINEER of its responsibility for the accuracy, adequacy, fitness, suitability and coordination of its work product.

ARTICLE 6 - PERIOD OF SERVICES

- 6.1** The ENGINEER shall commence services pursuant to this agreement as of April 11, 2014. The final completion date for the completion of design services as outlined in Article 2 shall be December 31, 2014.

The ENGINEER shall perform these services with reasonable diligence and expediency consistent with sound professional practices. The ENGINEER shall include in his schedule an allowance for time required for OWNER's review of submissions and for approvals of authorities having jurisdiction over the PROJECT. When approved by the OWNER, the schedule shall not be exceeded by the ENGINEER, except for cause.

If the ENGINEER becomes aware of delays due to time allowances for review and approval being exceeded, delay by the OWNER, the OWNER's consultants, or any other reason beyond the ENGINEER's control, which may result in the schedule of performance of the ENGINEER's services not being met, the ENGINEER shall promptly notify the OWNER. If the OWNER becomes aware of any delays or other causes that will affect the ENGINEER's schedule, the OWNER shall promptly notify the ENGINEER. In either event, the ENGINEER's schedule for performance of its services shall be equitably adjusted.

ARTICLE 7 - PAYMENT TO THE ENGINEER

7.1 BASIC SERVICES

The OWNER shall compensate the ENGINEER for services rendered pursuant to this Agreement, excepting those services described as Additional Services in Article 4 of this Agreement, by payment of the LUMP SUM AMOUNT OF TWO HUNDRED TEN THOUSAND FOUR HUNDRED THIRTY-SIX AND NO/100 DOLLARS (\$210,436.00) for design services as described in Article 2. Additional services of the ENGINEER as described in Article 4, if any, shall be compensated on an hourly basis in accordance with Attachment 5.

7.2 REIMBURSABLE EXPENSES

The scope of work for sub-contracted services is defined in the ENGINEER's scope of services, Attachment 1. The scope includes provisions for administration expenses for subcontracted services and reimbursable direct expenses including but not limited to laboratory tests and analyses; computer services; word processing services; permit fees, bonds, telephone, printing, binding and reproduction charges; and other similar costs. Indirect costs will have administrative fee reimbursements limited to no more than 5%. Direct costs are also limited to no more than 5% reimbursement.

Reimbursable expenses shall be limited during the term of this agreement as stated in Art. 7.1 Basic Services.

7.3 EFFECTIVE DATE

This contract shall have no force or effect unless and until it is executed by the OWNER and the ENGINEER and a properly executed copy is mailed to the ENGINEER with a notice to proceed (NTP). If a NTP is not issued within sixty (60) days commencing from the last date of execution of this CONTRACT by the OWNER and the ENGINEER, then this CONTRACT shall be NULL AND VOID, the OWNER will not be obligated to any payment to the ENGINEER and the ENGINEER will not be obligated to perform any work under said CONTRACT.

PAYMENT SUMMARY

Engineering Design Services – LUMP SUM AMOUNT OF	\$210,436.00
TOTAL CONTRACT AMOUNT:	<u>\$210,436.00</u>

ARTICLE 8 - GENERAL PAYMENT PROCEDURE

8.1 INVOICES

8.1.1 The ENGINEER shall submit monthly invoices to the Administrative Officer in the Engineering Department, for the basic services described under Articles 2 and 4 for the design of the PROJECT. Invoices must include the City of Huntsville project name and number, dates of services, contract amount, previous billings and current billing. Additionally, invoices for services that are not contracted for as "lump sum" in Article 4 must also be itemized and include, as a minimum, a description of each task performed, the amount of time utilized performing each task, the name(s) of personnel who performed the task and the cost for each specific task. Along with each invoice, the ENGINEER must submit a consultant progress report in the format shown in Attachment 6 hereto. No payment will be made without the consultant progress report completed and attached. Monthly progress reports shall be submitted monthly even if no request for payment is made. If services under Article 4 are included in the invoice for additional services not included under the lump sum provisions, or services billed as time and material, the classification and hours of such persons rendering the services shall be attached to the invoice.

8.1.2 The signature of the ENGINEER on the invoice shall constitute the ENGINEER's representation to the OWNER that the services indicated in the invoice have progressed to the level indicated, have been properly and timely performed as required herein, that the reimbursable expenses included in the invoice have been reasonably incurred, that all obligations of the ENGINEER covered by prior invoices have been paid in full, and that, to the best of the ENGINEER's knowledge, information and informed belief, the amount requested is currently due and owing, there being no reason known to the ENGINEER the payment of any portion thereof should be withheld. Submission of the ENGINEER's invoice for final payment and reimbursement shall further constitute the ENGINEER's representation to the OWNER that, upon receipt from the OWNER of the amount invoiced, all obligations of the ENGINEER to others, including its consultants, incurred in connection with the PROJECT, have been paid in full. ENGINEER must designate on Attachment 6 – Progress Report in the appropriate space provided that such action has been completed.

8.2 TIME FOR PAYMENT

The OWNER shall make payment for services in Articles 2 and 4 within 60 days of receipt of valid invoice.

8.3 OWNER'S RIGHT TO WITHHOLD PAYMENT

In the event the OWNER becomes credibly informed that any representations of the ENGINEER, provided pursuant to Article 8.1.2, are wholly or partially inaccurate, the OWNER may withhold payment of sums then or in the future otherwise due to the ENGINEER until the inaccuracy, and the cause thereof, is corrected to the OWNER's reasonable satisfaction. Additionally, failure by the ENGINEER to supply substantiating records shall be reason to

exclude related costs from the amounts which might otherwise be payable by the OWNER to the ENGINEER.

8.4 REIMBURSABLE EXPENSES

8.4.1 In addition to the requirements set forth in 8.1 above, invoices for reimbursable expenses shall include such documentation as the OWNER may require. Reasonable expenses are limited to the following expenses:

- (a) Transportation outside the immediate Huntsville area (50 mile radius) approved in advance by the OWNER in writing and incurred in connection with the PROJECT; (Per Department of Treasury, Internal Revenue Service Publication 1542, Per Diem Rates, for travel within the continental United States). Refer to website: www.irs.gov/pub/irs-pdf/p1542.pdf for more information.
- (b) Charges for long-distance communications;
- (c) Fees paid for securing approval of authorities having jurisdiction over the PROJECT,
- (d) Actual costs of reproduction for items in excess of those included in the required services;
- (e) Postage and handling charges incurred for drawings, specifications and other documents.

8.4.2 The ENGINEER shall set forth with particularity on its invoice the nature and cost of the expense item being billed, and attach to its invoice the written authorization, if any, required for such item; and shall bill expenses at actual cost or prevailing rate ~~and without the addition of administrative charge, any multiple or surcharge.~~

8.5 W-9 TAXPAYER FORM

All ENGINEERING FIRMS are required to submit a Federal Tax Form W-9 to City of Huntsville at the time a contract is awarded. No payments of invoices can be made until this W-9 Tax Form has been properly submitted. A copy of the W-9 Tax Form can be requested from the OWNER or at the following website: www.irs.ustreas.gov/pub/irs-pdf/fw9.pdf

ARTICLE 9 - GENERAL CONSIDERATIONS

9.1 GENERAL

OWNER and ENGINEER agree that the following sections and provisions shall apply to the work to be performed under this Agreement and that such provisions shall supersede any conflicting provisions of this Agreement.

9.2 SUB-CONTRACTED SPECIALIZED SERVICES

The ENGINEER may sub-contract specialized services required of the PROJECT to competent and experienced sub-consultants approved by the OWNER in writing. As a prime professional, the ENGINEER shall act as OWNER's representative for contracting, directing, and managing the services of sub-consultants. The OWNER shall have the right to reject any consultant provided that the OWNER raises a timely objection. At the time of the execution of this Agreement, the parties anticipate that the consultants listed in Attachment "7" hereto will be retained by the ENGINEER to provide services with respect to the PROJECT. Expenses payable to the ENGINEER for subcontracted services are limited to no more than 5% of the cost of the subcontracted services

9.3 PEER REVIEW

The OWNER reserves the right to conduct, at the OWNER's expense, peer review of designs and drawings prepared by the ENGINEER and/or sub-consultant(s) for the PROJECT. The ENGINEER and sub-consultant(s) agree that knowledge and consent to review of their work by other engineers of the OWNER's choosing is hereby given in accordance with the ADMINISTRATIVE CODE (RULES AND REGULATIONS) of the Alabama State Board of Licensure for Professional Engineers and Land Surveyors, Chapter 330-X-14-.06(a) (13) effective January 2008 and as may be amended now or in the future pertaining to the Code of Ethics for review of the work of another engineer.

9.4 CLARIFICATION OF WORK

If reviewing agencies raise questions regarding the work of ENGINEER, OWNER will participate in such meetings as deemed necessary to explain and clarify this work.

9.5 CANCELLATION OF WORK

This Agreement may be canceled by either party in the event of default or violation of any of the provisions of this Agreement by the other party, by written notice delivered to the address of record by registered mail giving ten (10) days advance notice of the intention to cancel. In the event of cancellation of this Agreement, ENGINEER shall be paid for all work performed to date of cancellation, less any loss, damage, or liability incurred by reason of default of ~~ENGINEER and all records, data, parameters, design calculations and other information~~ collected or obtained in the performance of this Agreement shall be delivered to OWNER.

9.6 CHANGES

9.6.1 The OWNER may, at any time by written order, make changes within the general scope of the Agreement in the services to be provided. If such changes cause an increase or decrease in ENGINEER's cost of, or time required for performance of any services, whether or not changed by any order, an equitable adjustment shall be made and the Agreement shall be modified in writing accordingly. Upon notification of change, ENGINEER must assert any claim of ENGINEER for adjustment in writing within 30 days from the date of receipt unless OWNER grants a further period of time.

9.6.2 If findings in any phase of this PROJECT significantly alter the scope of work for subsequent phases, or if regulations are changed resulting in a scope of work change for any phase, engineering fees set forth in Article 7 may be renegotiated by the OWNER and ENGINEER.

9.7 ENGINEER'S RECORDS

Documentation accurately reflecting services performed and the time expended by the ENGINEER and his personnel and records of reimbursable expenses shall be prepared concurrently with the performance of the services and shall be maintained by the ENGINEER. The ENGINEER shall maintain record copies of all written communications, and any memoranda of verbal communications related to the PROJECT. All such records and documentation shall be maintained for a minimum of five (5) years after the PROJECT date of final completion or for any longer period of time as may be required by law or good practice. If the ENGINEER receives notification of a dispute or of pending or commencement of litigation during this five-year period, the ENGINEER shall continue to maintain all PROJECT records until final resolution of the dispute or litigation. The ENGINEER shall make such records and documentation available to the OWNER upon notice and shall allow

the authorized representative(s) of the OWNER to inspect, examine, review and copy the ENGINEER's records at the OWNER's reasonable expense.

9.8 SEAL ON DOCUMENTS

9.8.1 Final plans and drawings shall be marked "ISSUED FOR CONSTRUCTION". When a firm, partnership, or corporation performs the work, each drawing shall be sealed and signed by the licensed engineer or engineers who were in responsible charge of the work.

9.8.2 When plans and drawings issued for construction were not performed by a firm, partnership, or corporation, the first sheet or title page shall be sealed, dated, and signed by the engineer who was in responsible charge. Two or more licensed professional engineers may affix their signatures and seals provided it is designated by a note under the seal the specific subject matter for which each is responsible. In addition, each drawing shall be sealed and signed by the licensee or licensees responsible for each sheet.

9.8.3 When plans or drawings are a site adaptation of a standard design or plan or make use of a standard drawing of others, the ENGINEER shall take measures to assure that the site adaptation, standard drawing, or plan is appropriate and suitable for the use proposed by the ENGINEER including meeting the specific site conditions, functionality, design criteria, safety considerations, etc. After taking such measures, ~~the ENGINEER shall seal the standard drawing or plan as shown above~~ in sections 9.8.1 and 9.8.2. The ENGINEER shall not utilize standards of others without their written consent where written consent is required or implied.

9.8.4 Each sheet of documents, specifications, and reports for engineering practice and of maps, plats, charts, and reports for land surveying practice, shall be signed, sealed, and dated by the licensed engineer or land surveyor who prepared the documents or under whose responsible charge the documents were prepared. Where more than one sheet is bound together in one volume, including but not limited to reports and specifications, the licensee who prepared the volume, or under whose responsible charge the volume was prepared, may sign, seal, and date only the title or index sheet, provided that this sheet clearly identifies all of the other sheets comprising the bound volume, and provided that any of the other sheets which were prepared by, or under the responsible charge of, another licensee, be signed, sealed, and dated by the other licensee.

9.9 USE AND OWNERSHIP OF DOCUMENTS

All rights of ownership, copyrights, construction documents, including all drawings, specifications and other documents, electronic media, computer source code, or things prepared by or on behalf of the ENGINEER for the PROJECT are hereby transferred to the OWNER and shall be the sole property of the OWNER and are free of any retention rights of the ENGINEER. The ENGINEER hereby grants to the OWNER an unconditional right to use or to refer to, for any purpose whatsoever, the construction documents and any other documents or electronic media, computer source code prepared by or on behalf of the ENGINEER for the PROJECT, free of any copyright claims, trade secrets or other proprietary rights with respect to such documents. The ENGINEER shall be permitted to retain copies thereof for its records. The ENGINEER's documents and other work products are not intended or represented to be suitable for re-use by OWNER or others on extensions of the PROJECT or on any other PROJECT. Any re-use without specific written verification or adaptation by ENGINEER will be at OWNER's sole risk and without liability or legal exposure to ENGINEER, and OWNER shall indemnify and hold harmless ENGINEER from all claims,

damages, losses and expenses including attorneys' fees arising out of, or resulting from, such reuse by the OWNER; provided however, that this agreement to indemnify and save harmless shall not apply to any reuse of documents retained by, or through, the ENGINEER.

9.10 ESTIMATE OF CONSTRUCTION COST

Since ENGINEER has no control over the construction cost of labor, materials, or equipment, or over the construction contractor(s) methods of determining prices, or over competitive bidding or market conditions, his opinion of probable PROJECT cost or construction cost provided for herein are to be made on the basis of his experience and qualifications and represent his best judgment as a design professional familiar with the construction industry; but, ENGINEER cannot and does not guarantee that proposals, bids or construction costs will not vary from opinions of probable cost prepared by him. If OWNER wishes greater assurance as to the construction cost, he will employ an independent cost estimator.

9.11 TERMINATION FOR CAUSE

This Agreement may be terminated by either party upon seven (7) days written notice to the other should such other party fail substantially to perform in accordance with its material terms through no fault of the party initiating the termination.

9.12 TERMINATION BY THE OWNER WITHOUT CAUSE

The OWNER may terminate this Agreement without cause upon seven (7) days' written notice to the ENGINEER. In the event of such a termination without cause, the ENGINEER shall be compensated for all services performed prior to termination, together with Reimbursable Expenses incurred. In such event, the ENGINEER shall promptly submit to the OWNER its invoice for final payment and reimbursement which invoice shall comply with the provisions of Paragraph 8.1.

ARTICLE 10 - INDEMNITY AND INSURANCE

10.1 INSURANCE

The ENGINEER shall carry insurance of the following kinds and amounts in addition to any other forms of insurance or bonds required under the terms of the contract specifications. The ENGINEER shall procure and maintain for the duration of the job until final acceptance by the OWNER, or as later indicated, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the ENGINEER, his agents, representatives, employees or subcontractor.

10.2 MINIMUM SCOPE OF INSURANCE:

A. General Liability:

Insurance shall be written on an occurrence basis. Claims-made coverage will be accepted only on an exception basis after the OWNER's approval. The same insurance company should write General Liability Coverage and OWNERs ENGINEERs Protective Insurance.

B. Commercial General Liability

Products and Completed Operations
Contractual
Personal Injury
Explosion, Collapse and Underground
Broad Form Property Damage

C. Professional Liability:

Insurance may be written on a "claims-made" basis, providing coverage for negligent acts, errors or omissions in the performance of professional services. Coverage shall be maintained for a discovery and reporting period of no less than five (5) years after completion of the professional services and Certificates of Insurance shall be submitted to the OWNER on a yearly basis during this time frame. Coverage shall be no less comprehensive than that which is carried by at least 25% of the registered engineers or engineering firms contracting in the State of Alabama. Such coverage shall be carried on a continuous basis including prior acts coverage to cover the subject PROJECT. The professional liability insurance shall contain contractual liability coverage.

D. Automobile Liability:

Business Automobile Liability providing coverage for all owned, hired and non-owned autos. ~~Coverage for loading and unloading shall be provided under either automobile liability or general liability policy forms.~~

E. Workers' Compensation Insurance:

Statutory protection against bodily injury, sickness or disease or death sustained by employee in the scope of employment. Protection shall be provided by a commercial insurance company or a recognized self-insurance fund authorized before the State of Alabama Industrial Board of Relations. "Waivers of Subrogation" in favor of the OWNER shall be endorsed to Workers' Compensation Insurance.

F. Employers Liability Insurance:

Covering common law claims of injured employees made in lieu of or in addition to a worker's compensation claim.

10.3 MINIMUM LIMITS OF INSURANCE:

A. General Liability:

Commercial General Liability on an "occurrence form" for bodily injury and property damage:

\$ 2,000,000 General Aggregate Limit
\$ 2,000,000 Products - Completed Operations Aggregate
\$ 1,000,000 Personal & Advertising Injury
\$ 1,000,000 Each Occurrence

B. Professional Liability:

Insurance may be made on a "claims-made" basis:

\$ 500,000 Per Claim - Land Surveyors

\$ 1,000,000 Per Claim - Other Professionals

C. Automobile Liability:

\$ 1,000,000 Combined Single Limit per accident for bodily injury and property damage.

D. Workers' Compensation:

As required by the State of Alabama Statute

E. Employers Liability:

\$ 1,000,000 Bodily Injury by Accident or Disease

\$ 1,000,000 Policy Limit by Disease

10.4 OTHER INSURANCE PROVISIONS:

The OWNER is hereby authorized to adjust the requirements set forth in this document in the event it is determined that such adjustment is in the OWNER's best interest. If the insurance requirements are not adjusted by the OWNER prior to the OWNER's release of specifications with regard to the PROJECT in question, then the minimum limits shall apply. The City of Huntsville/OWNER shall be named on the policies of general liability and automobile insurance and on the certificate of insurance as an Additional Insured. Additional Insured status on the Commercial General Liability policy shall be through ISO Additional Endorsement CG 20 10 11 85 or equivalent and coverage shall be afforded on a primary basis.

The policies are to contain, or be endorsed to contain, the following provisions:

A. All Coverage:

The ENGINEER is responsible to pay all deductibles. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled, non-renewal or materially changed by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the OWNER. Cancellation of coverage for non-payment of premium will require ten (10) days written notice to the OWNER.

10.5 ACCEPTABILITY OF INSURERS:

Insurance is to be placed with insurers authorized by the State of Alabama with an A. M. Best rating of A-V or better.

10.6 VERIFICATION OF COVERAGE:

The OWNER shall be indicated as a Certificate Holder and the ENGINEER shall furnish the OWNER with Certificates of Insurance reflecting the coverage required by this document. The A. M. Best rating and deductibles, if applicable, shall be indicated on the Certificate of Insurance for each insurance policy. The certificates for each insurance policy are to be

signed by a person authorized by that insurer to bind coverage on its behalf and must be an original signature. Certificates signed using digital signatures will not be accepted unless accompanied by a written statement from the insurance/surety company indicating that their electronic signature is intended as their signature. All certificates are to be received and approved by the OWNER before work commences. The OWNER reserves the right to require complete, certified copies of all required insurance policies at any time.

10.7 CONSULTANTS AND/OR SUBCONTRACTORS WORKING FOR THE ENGINEER:

The ENGINEER shall furnish separate certificates and/or endorsements for each subcontractor and/or consultant showing insurance of the same type or types and to the extent of the coverage set forth in this Article 10.

10.8 HOLD HARMLESS AGREEMENT:

A. Other Than Professional Liability Exposures:

The ENGINEER, to the fullest extent permitted by law, shall indemnify and hold harmless the OWNER, its elected and appointed officials, employees, agents, and representatives against all claims, damages, losses and expenses, including, but not limited to, attorney's fees, arising out of or resulting from the performance of the work, provided that any such claim, damage, loss or expense (1) is attributable to personal injury, including bodily injury sickness, disease or death, or to injury to or destruction of tangible property, including loss of use resulting there from, and (2) is caused by any negligent act or omission of the ENGINEER or any of their consultants, or anyone directly or indirectly employed by them or anyone for whose acts they are legally liable. Such obligation should not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity, which would otherwise exist as to any party or person, described in this paragraph.

B. Professional Liability:

The ENGINEER agrees, to the fullest extent permitted by law, to defend, protect, indemnify and hold harmless the OWNER, its elected and appointed officials, officers, directors, employees, agents, and representatives from and against any and all liability, claims, demands, damages, loss, costs, fees, and expenses (including actual fees and expenses of attorneys, expert witnesses, and other consultants) actually or allegedly arising out of, or resulting from, the professional services of the ENGINEER or the ENGINEER's consultants, subcontractors, or suppliers, including, without limitation, any breach of contract or any negligent acts, errors, or omissions in the performance of the professional services provided pursuant to or as a result of this Agreement. Neither, the OWNER nor the ENGINEER shall be obligated to indemnify the other party in any manner whatsoever for the other parties own negligence.

To the fullest extent permitted by law, the ENGINEER shall defend, protect, indemnify, and hold harmless the OWNER, its elected and appointed officials, officers, directors, employees, agents, and representatives from and against any and all liability, claims, demands, damages, loss, costs, fees and expenses (including actual fees and expenses of attorneys, expert witnesses, and other consultants) for infringement of patent rights, copyrights, or other intellectual property rights, except with respect to designs, processes or products of a particular manufacturer expressly required by the OWNER in writing. If the ENGINEER has reason to believe the use of a required design, process or product is an infringement of a patent, the ENGINEER shall be responsible for such loss unless such information is promptly given to the OWNER.

ARTICLE 11- MISCELLANEOUS PROVISIONS

11.1 GOVERNING LAW

This Agreement shall be governed by the law of the State of Alabama.

11.2 INTENT AND INTERPRETATION

11.2.1 The intent of this contract is to require complete, correct and timely execution of the work. Any work that may be required, implied or inferred by the contract documents, or any one or more of them, as necessary to produce the intended result shall be provided by the ENGINEER.

11.2.2 This contract is intended to be an integral whole and shall be interpreted as internally consistent. What is required by any one contract document shall be considered as required by the contract.

11.2.3 When a word, term or phrase is used in this contract, it shall be interpreted or construed, first, as defined herein; second, if not defined, according to its generally accepted meaning in the engineering industry; and third, if there is no generally accepted meaning in the engineering industry, according to its common and customary usage.

11.2.4 The words "include", "includes", or "including", as used in this contract, shall be deemed to be followed by the phrase, "without limitation".

11.2.5 The specification herein of any act, failure, refusal, omission, event, occurrence or condition as constituting a material breach of this contract shall not imply that any other, non-specified act, failure, refusal, omission, event, occurrence or condition shall be deemed not to constitute a material breach of this contract.

11.2.6 Words or terms used as nouns in this contract shall be inclusive of their singular and plural forms, unless the context of their usage clearly requires a contrary meaning.

11.3 TIME IS OF THE ESSENCE

Time limitations contained herein, or provided for hereby, are of the essence of this Agreement. The ENGINEER understands and acknowledges that time is of the essence in completion of the PROJECT and that the OWNER will incur damages if the PROJECT is not completed on time.

11.4 SUCCESSORS AND ASSIGNS

The ENGINEER shall not assign its rights hereunder, excepting its right to payment, nor shall it delegate any of its duties hereunder without the written consent of the OWNER. Subject to the provisions of the immediately preceding sentence, the OWNER and the ENGINEER, respectively, bind themselves, their successors, assigns and legal representatives to the other party to this Agreement and to the successors, assigns and legal representatives of such other party with respect to all covenants of this Agreement. Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of any public body that may be party hereof, nor shall it be construed as giving any rights or benefits hereunder to anyone other than OWNER and ENGINEER.

11.5 THIRD-PARTY BENEFICIARIES

The City of Madison and Alabama Department of Transportation are considered to be third party beneficiaries to this Agreement. Otherwise, this Agreement shall inure solely to the benefit of the parties hereto and their successors and assigns. Nothing contained herein is intended to or shall create a contractual relationship with, or any rights in favor of, or any cause of action in favor of, any third party, other than the City of Madison and the Alabama Department of Transportation against the OWNER or the ENGINEER.

11.6 INTELLECTUAL PROPERTY/ CONFIDENTIALITY

All information, documents, and electronic media, computer source code furnished by the OWNER to the ENGINEER belong to the OWNER, are considered proprietary and confidential, unless otherwise indicated by the OWNER, and are furnished solely for use on the OWNER's PROJECT. Such information, documents, and electronic media, computer source code shall be kept confidential by the ENGINEER, shall only be released as necessary to meet official regulatory requirements in connection with the PROJECT, and shall not be used by the ENGINEER on any other PROJECT or in connection with any other person or entity, unless disclosure or use thereof in connection with any matter other than services rendered to the OWNER hereunder is specifically authorized in writing by the OWNER in advance. This Section 11.6 shall survive the expiration of this Agreement.

11.7 SUBCONTRACT REQUIREMENTS

The ENGINEER shall include the terms and conditions of this Agreement in every subcontract or agreement with a consultant for this PROJECT so that these terms and conditions shall be binding upon each subcontractor or consultant. The subcontractor(s)/consultant(s) will maintain all licenses and certifications to practice its profession or trade by all public entities having jurisdiction over the PROJECT. The subcontractor (s)/consultant(s) further represent to the OWNER that the subcontractor(s)/consultant(s) will maintain all necessary licenses, certifications, permits or other authorizations necessary for the PROJECT until the remaining duties hereunder have been satisfied.

11.8 NOTICES

Unless otherwise provided, all notices shall be in writing and considered duly given if the original is hand delivered; if delivered by facsimile to 256-427-5325, or is sent by U.S. Mail, postage prepaid to City of Huntsville Engineering, P. O. Box 308 (35804), 320 Fountain Circle (35801), Huntsville, AL. All notices shall be given to the addresses set forth above. Notices, hand delivered or delivered by facsimile, shall be deemed given the next business day following the date of delivery. Notices given by U.S. Mail shall be deemed given as of the second business day following the date of posting.

11.9 STRICT COMPLIANCE

No failure of the OWNER to insist upon strict compliance by the ENGINEER with any provision of this Contract for Professional Services shall operate to release, waive, discharge, modify, change or affect any of the ENGINEER's obligations.

11.10 WAIVER

No provision of this Agreement may be waived except by written agreement of the parties. A waiver of any provision on one occasion shall not be deemed a waiver of that provision on any subsequent occasion, unless specifically stated in writing. A waiver of any provision shall not affect or alter the remaining provisions of this Agreement.

11.11 SEVERABILITY

If any provision of this Agreement, or the application thereof, is determined to be invalid or unenforceable, the remainder of that provision and all other provisions of this Agreement shall remain valid and enforceable.

11.12 ETHICS

The ENGINEER shall not offer or accept any bribes or kickbacks from or to any manufacturer, consultant, trade contractor, subcontractor, supplier or any other individual or entity in connection with the PROJECT. The ENGINEER shall not confer on any governmental, public or quasi-public official having any authority or influence over the PROJECT any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised. The ENGINEER shall not, without the express written permission of the OWNER, engage or recommend to the OWNER engagement of any consultant, trade contractor, subcontractor, or supplier to provide services on behalf of the ENGINEER, OWNER or PROJECT in which the ENGINEER has a direct or indirect proprietary or other pecuniary interest; or call for the use of or by exclusion require or recommend the use of products, materials, equipment, systems, processes or procedures in which the ENGINEER or in which any consultant, trade contractor, subcontractor, or supplier of the ENGINEER has a direct or indirect proprietary or other pecuniary interest. Without prior notification and written approval of the OWNER, the ENGINEER and the ENGINEER'S subconsultants shall not offer services to the OWNER'S contractor.

11.13 ENTIRE AGREEMENT

This Agreement represents the entire agreement between the OWNER and the ENGINEER and supersedes all prior communications, negotiations, representations or agreements, either written or oral. This agreement may be amended only by written instrument signed by both OWNER and ENGINEER.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first above written.

OWNER:
CITY OF HUNTSVILLE

ENGINEER:
GARVER, L.L.C.

BY: _____
Tommy Battle

BY: _____
Jerry D. McCarley

TITLE: _____
Mayor

TITLE: _____
Vice President

ATTEST: _____

ATTEST: _____

Given under my hand this _____ day

Given under my hand this _____ day

Of _____, 2014.

Of _____, 2014.

Notary Public

Notary Public

My commission expires _____

My commission expires _____

ATTACHMENT 1-SCOPE OF SERVICES

(Refer to letter dated March 28, 2014, from Scott Leach to Kathy Martin and attachments).



5125A Research Drive
Huntsville, AL 35805

TEL 256.534.5512
FAX 256.534.5544

www.GarverUSA.com



March 28, 2014

Ms. Kathy Martin, PE
Director of Engineering
City of Huntsville
320 Fountain Circle
Huntsville, AL 35801

Attn: Mr. Bill Boggess, PE, REM

A handwritten signature in dark ink, appearing to be 'MB' or similar initials.

RE: ALDOT Project No. STPHV-8507(600)
Zierdt Road Northbound Lanes
From South of Martin Road to
North of Madison Boulevard
In the City of Huntsville, Madison County, AL

Mr. Boggess:

We have reviewed the mark-ups provided by ALDOT on our man-day estimate and fee proposal for the roadway plans development on the above referenced project. The recommended fee approved by ALDOT has been reduced as follows:

Roadway Contract Plans: Revised from \$240,866 to \$210,436

We are in agreement that these revised fees are fair and reasonable compensation for performing the scope of work defined herein for this project. Enclosed is a copy of the revised fee proposal, scope of work, man-day estimate sheets, etc. reflecting the revisions provided by ALDOT. These items are being submitted for your use, review, and further distribution to ALDOT's First Division Office for approval. After receipt of ALDOT authorization for the City to enter into an Agreement with Garver for performing these services at the aforementioned fees, the contract between Garver and the City of Huntsville can be prepared for approval by City Council Resolution. It is understood that our existing contract will be voided upon execution of this Agreement. We are ready to begin work upon receipt of an executed contract and Notice to Proceed.

We look forward to continue working with you and the City of Huntsville on this very important project. Please let me know if you have any questions or need additional information regarding this project of any of the items submitted.

Sincerely,
Garver, LLC

A handwritten signature in dark ink, appearing to be 'Scott C. Leach'.

Scott C. Leach, PE
Senior Project Manager

CC: Project File

Project No. <u>STPHV-8507(600)</u>	
County <u>Madison</u>	
Description <u>Zierdt Rd NB Lanes _N of Martin Rd to S of Madison Blvd</u>	
Scope of Work <u>Grade, Drain, Base, Pave, and Traffic Signals</u>	
Project Length <u>2.85 Miles</u>	
Consultant <u>Garver, LLC</u>	
GRAND TOTAL OF FEE PROPOSAL	
Corridor Study	\$0
Field Surveys	\$0
Preliminary Roadway Plans	\$0
Preliminary Bridge Plans	\$0
Right-of-Way Map, Tract Sketches and Deeds	\$0
Roadway Plans	\$210,436
Bridge Plans	\$0
GRAND TOTAL FEE	\$210,436

Combined overhead rate (%) >>>>>>>>>>>	195.9
--	-------

Facilities Capital Cost of Money (if used) >>>>>	0.58
--	------

LABOR RATES

Classification	Daily Rate
Project Manager	\$480.80
Engineer	\$293.52
Environmental	\$0.00
Engineering Technician/CADD	\$189.72
Environmental Technician	\$0.00
Clerical	\$135.36
PLS	\$0.00
Survey Crew	\$0.00

****Certification of Out-of-Pocket Expenses:**

If Out-of-Pocket Expenses are included in this proposal, we hereby certify that these costs are not included in the Combined Overhead Rate and are typically invoiced to all clients as a direct job cost.

A. Clach MARCH 20, 2014
Signed Date
S.P. ROJER / MANAGER
Position/Title

3/20/2014

Alabama Department of Transportation

6:43 PM

Project Number STPHV-8507(600) CPMS # _____ County Madison Description Zierdt Rd NB Lanes, N of Martin Rd to S of Madison Blvd Scope of work Grade, Drain, Base, Pave, and Traffic Signals Length 2.85 miles Consultant Garver, LLC					
ROADWAY PLANS SHEET TITLE	NO OF SHEETS	ESTIMATED MAN-DAYS			
		ENGINEER		TECHNICIAN	
		SHEET	TOTAL	SHEET	TOTAL
TITLE SHEET	1.00	0.05	0.05	0.10	0.10
INDEX SHEET	1.00	0.05	0.05	0.15	0.15
GEOMETRIC LAYOUT/SURVEY CONTROL	5.00	0.15	0.75	0.25	1.25
PROJECT NOTE SHEET (Project)	1.00	0.75	0.75	1.25	1.25
PROJECT NOTE SHEET (TCP)	1.00	0.25	0.25	0.50	0.50
PROJECT NOTE SHEET (Signage)					
PROJECT NOTE SHEET (Signals)	1.00	0.25	0.25	0.50	0.50
PROJECT NOTE SHEET (ITS)					
PROJECT NOTE SHEET (Lighting)					
PROJECT NOTE SHEET (Traffic Loops)					
PLANS LEGEND & ABBREVIATIONS	2.00			0.15	0.30
TYPICAL SECTIONS					
Main Roadway	3.00	0.25	0.75	0.75	2.25
Cross Roads	1.00	0.50	0.50	1.00	1.00
Detour & Misc.	2.00	0.50	1.00	1.00	2.00
Ramps					
Ditches	1.00	0.25	0.25	0.75	0.75
SUMMARY SHEET					
Main Summary	2.00	0.75	1.50	1.50	3.00
SUMMARY BOX SHEETS					
Roadway Drainage (non-culvert)	1.00	0.75	0.75	1.50	1.50
Culvert Extension, New Culvert	0.25	0.50	0.13	0.40	0.10
Bridge Culvert Extension, New Bridge Culvert					
Guardrail/End Anchors					
Slope Paving (Under Bridges)					
Side Drain Pipe	0.50	0.50	0.25	1.00	0.50
Signing	0.50	0.50	0.25	1.00	0.50
Base & Pavement	0.75	0.50	0.38	1.00	0.75
Bridge					
Striping & Pavement Markings	0.50	0.75	0.38	1.00	0.50
Curb & Gutter	0.75	0.50	0.38	1.00	0.75
Bridge End Slabs					
Roadway Lighting					
Signals	0.50	1.00	0.50	1.50	0.75
ITS					
Sidewalk					
Slope Paving (Ditches)/Ditch Summary	0.75	0.75	0.56	1.50	1.13
Concrete Safety Barrier					
Retaining Wall					
Misc. Boxes	1.00	0.20	0.20	1.50	1.50
Erosion Control	1.00	0.50	0.50	1.00	1.00
Removal Items	0.50	0.75	0.38	1.00	0.50
Utility Relocation					
PLAN & PROFILE					
Main Roadway	11.00	0.50	5.50	0.75	8.25
Crossroads	6.00	0.25	1.50	0.50	3.00
Detours / Diversions	2.00	1.00	2.00	2.00	4.00
Retaining Walls					

ROADWAY PLANS SHEET TITLE	NO OF SHEETS	ESTIMATED MAN-DAYS			
		ENGINEER		TECHNICIAN	
		SHEET	TOTAL	SHEET	TOTAL
PAVING LAYOUT (includes striping)					
Main Roadway	6.00	0.25	1.50	1.00	6.00
Crossroads	4.00	0.25	1.00	0.50	2.00
Intersections	2.00	1.00	2.00	2.00	4.00
INTERCHANGES					
Geometrics					
Ramps Profiles					
Site Grading					
Cross Sections					
Signing					
Ramp Gore Details					
TRAFFIC CONTROL					
Sequence of Construction	1.00	1.00	1.00	1.50	1.50
Summary & Items	1.00	0.50	0.50	1.50	1.50
Typical Section Sketches	1.00	0.25	0.25	0.50	0.50
Layout Sheets (signs, devices, shifts, etc.)	18.00	0.10	1.80	0.60	10.80
Special Drawings	6.00	0.25	1.50	0.50	3.00
SIGNING					
Sign Layout	6.00	0.25	1.50	0.50	3.00
Sign X-Section					
Sign Panel Details					
Soils Data Sheets (provided by ALDOT)					
SIGNALIZATION					
Signal Layout and Traffic Analysis (1 per site)	3.00	0.30	0.90	1.00	3.00
Traffic Counts (1 per site)	3.00	0.10	0.30	1.00	3.00
Signal Warrant Analysis (1 per site)	3.00	0.10	0.30	0.50	1.50
Soils Data Sheets	6.00	0.10	0.60	0.20	1.20
ITS					
Systems Engineering					
Special Study					
Legend					
Special Details					
ITS Layouts					
Optical Fiber Splice Charts					
Fiber - Cable Routing Diagram					
Specifications					
LIGHTING					
Plan Layout					
Demo Plans					
Special Details					
Soils & Passive Pressure (provided by ALDOT)					

ROADWAY PLANS SHEET TITLE	NO OF SHEETS	ESTIMATED MAN-DAYS			
		ENGINEER		TECHNICIAN	
		SHEET	TOTAL	SHEET	TOTAL
UTILITY SHEETS					
Utility Locations (plan/profile)	15.00	0.10	1.50	0.20	3.00
DRAINAGE SECTIONS					
Pipe & Culvert X-Sect./Hydraulic Computations	56.00	0.10	5.60	0.25	14.00
Hydraulic Data Sheet	2.00	0.25	0.50	0.50	1.00
Details	6.00	0.75	4.50	1.50	9.00
Drainage Layout Sheets	10.00	0.25	2.50	1.00	10.00
SOIL SHEETS					
Soil Boring Logs	15.00	0.10	1.50	0.20	3.00
Soil Profile	15.00	0.10	1.50	0.20	3.00
EROSION CONTROL					
Legend & Sequence	2.00	0.25	0.50	0.50	1.00
Phased Sheets (Phase I)	10.00	0.20	2.00	0.40	4.00
Phased Sheets (Phase II)	10.00	0.25	2.50	0.40	4.00
Phased Sheets (Phase III)	10.00	0.20	2.00	0.40	4.00
CBMPP & NOI	2.00	1.00	2.00	2.00	4.00
ROADWAY CROSS SECTIONS					
Main Roadway (Includes placing UG utilities)	120.00	0.10	12.00	0.30	36.00
Crossroads (Includes placing UG utilities)	12.00	0.20	2.40	0.40	4.80
Earthwork Balancing	1.00	1.00	1.00	2.00	2.00
Diversions / Temporary Tie-Ins	10.00	0.20	2.00	0.40	4.00
REVIEW COMMENTS					
30% Review					
Plan-in-Hand Inspection					
PS&E Inspection			1.00		2.00
Cost Estimates			1.00		2.00
Design Hearing					
SUB-TOTAL	404.00		78.91		189.58
10% Supervision			7.89		
TOTALS	404.00		78.91		189.58

3/20/2014

Alabama Department of Transportation

6:43 PM

Project No. STPHV-8507(600)			
County Madison			
Description Zierdt Rd NB Lanes_N of Martin Rd to S of Madison Blvd			
Scope of Work Grade, Drain, Base, Pave, and Traffic Signals			
Project Length 2.85 Miles			
Consultant Garver, LLC			
Fee Proposal (Roadway Plans)			
PERSONNEL COST			
	Man-days x Daily Rate		
Project Manager (10% of Eng.)	7.89	\$ 480.80	\$ 3,793.51
Engineer	78.91	\$ 293.52	\$ 23,161.66
Engineering Technician/CADD	189.58	\$ 189.72	\$ 35,967.12
Clerical (50% of Project Manager)	4.80	\$ 135.36	\$ 649.73
	Total Direct Labor		\$ 63,572.02
Combined Overhead (%)	195.90		\$ 124,537.59
Out-of-Pocket Expenses**			\$ 2,860.60
	Sub-Total		\$ 190,970.21
Operating Margin (10%)			\$ 19,097.02
	Sub-Total		\$ 210,067.23
SUB-CONSULTANTS (attach man-day & fee FROM each sub-consultant; show total fee for each here)			
		\$	-
		\$	-
		\$	-
Subconsultant Administration Expense (5%)		\$	-
	Sub-Total	\$	210,067.23
Facilities Capital Cost of Money (% of Direct Labor)	0.58	\$	368.72
	TOTAL FEE	\$	210,435.95

**See Grand Total Fee sheet

Project No. STPHV-8507(600)
County Madison
Description Zierdt Rd NB Lanes_N of Martin Rd to S of Madison Blvd
Scope of Work Grade, Drain, Base, Pave, and Traffic Signals
Project Length 2.85 Miles

Consultant Garver, LLC

Out-of-pocket Expenses (Roadway Plans)

TRAVEL COST

Mileage Cost	Trips	Miles/Trip	\$/Mile	Total
Garver Office to ALDOT 1st Division (Guntersville)	2	70	\$0.560	\$ 78.40
Garver Office to ALDOT Central Office (Montgomery)	1	420	\$0.560	\$ 235.20
Miscellaneous Project Travel	1	150	\$0.560	\$ 84.00
Total Mileage Cost				\$ 397.60

Subsistence Cost	Days	# People	\$/Day	Total
Travel allowance (6 hour trips)	2	2	\$11.25	\$ 45.00
Travel allowance (12 hour trips - meal provided by others)			\$20.00	\$ -
Travel allowance (12 hour trips)			\$30.00	\$ -
Travel allowance (overnight)***	1	1	\$75.00	\$ 75.00
Total Subsistence Cost				\$ 120.00
Total Travel Cost				\$ 517.60

PRINTING / REPRODUCTION COST

Type of printing/reproduction	# of Sets	Sheets/Set	Total Sheets	Cost/Sheet	Total
P.S. & E. Inspection	10	410	4100	\$ 0.20	\$ 820.00
Final Review by Construction Bureau	4	410	1640	\$ 0.20	\$ 328.00
Office Engineer Submittal	1	410	410	\$ 1.50	\$ 615.00
CBMPP and NOI	2	150	300	\$ 0.10	\$ 30.00
Miscellaneous In-House Printing	1	1000	1000	\$ 0.20	\$ 200.00
	0	0	0	\$ -	\$ -
Total Printing/Reproduction Cost					\$ 1,993.00

Communication Cost (telephone, fax, etc.)

Total

\$ 200.00

Postage Cost (overnight, stamps, etc.)

Total

\$ 150.00

Other (provide description on next line)

Total

\$ -

Total Out-of-pocket Expenses \$ 2,860.60

Comments:

***You must have ALDOT approval for ANY overnight trips of less than 100 miles.

**ALDOT Project No. STPHV-8507(600)
Zierdt Road Northbound Lanes from
Martin Road to Madison Boulevard
In the City of Huntsville, Madison County, AL
Grade, Drain, Base, Pave, and Traffic Signals**

DESCRIPTION OF MAJOR DESIGN MODIFICATIONS REQUIRED:

The major modifications required of CONSULTANT to prepare a contract plans assembly for construction of Zierdt Road Northbound Lanes from approximately Station 25+00 to approximately Station 175+00 (a distance of 2.85 miles) includes:

1. Using Station Equations, the CONSULTANT's will prepare design plans based on a Northbound Lanes Centerline and Profile Grade at the center of the Northbound Lanes. The overall Zierdt Road Construction Centerline will be tied to the Northbound Lanes Centerline at both ends of the Project. CONSULTANT will modify the profile of the Northbound Lanes in a manner to ensure proper drainage is maintained. CONSULTANT will also revise design to reduce excavation required for the Northbound Lanes based on the Environmental Commitments stating: 1) *"all spoils/materials from the MMRP site must be coordinated with the IR Branch for determination of proper disposal methods"* and 2) *"all soil required for the project will be from a site off Redstone Arsenal."*
Minimizing the unclassified and/or borrow excavation required within the MMRP site will result in construction cost savings due to these Environmental Commitments.
2. The CONSULTANT will revise design to include Right-Turn deceleration lanes and Left-Turn lanes at the following major entrances: Ashbury Drive, Nature's Way, Belltower Lane, Bayshore Drive, Sunlake Blvd, Grandview Blvd North, Grandview Blvd South, Edgewater Drive, Mountainbrook Blvd North, and Mountainbrook Blvd South. This will ensure safe and efficient access to and from these residential developments during the timeframe when construction of the Southbound Lanes and greenway is underway. The CONSULTANT's design will not include curb, gutter or the concrete islands (channelizing) islands along the western edge of pavement (along the median.) The curb and gutter will be constructed as part of the Southbound Lanes project.
3. The CONSULTANT will design Temporary Roadway and Driveway Tie-Ins at the entrances along the West side of Zierdt Road to ensure access is provided to properties as part of the Northbound Lanes project so ingress/egress to each parcel is available when traffic is shifted to the Northbound Lanes before beginning the construction of the Southbound Lanes and Greenway project.

4. The CONSULTANT's design for the temporary two-lane, two-directional traffic that will be shifted to the Northbound Lanes after construction of this project is complete will be based on a 40mph Design Speed. Appropriate tapers, transitions, and deceleration lane lengths will be designed accordingly throughout the Project Limits. The permanent/final construction of the project (4-lane divided roadway with Northbound and Southbound Lanes) will be based on a 45mph Design Speed.
5. The CONSULTANT will include design and details necessary for the pavement transitions at the BEGIN and END Project. This will include temporary pavement tie-ins, signing, striping, and markings design.
6. The CONSULTANT will modify the striping, markings and pavement markers design as needed to accommodate two-way traffic on the Northbound Lanes. The plans will be modified to include construction of the Northbound Lanes to the Upper Binder Layer and permanent thermoplastic striping, markings, and legends will be placed on the Upper Binder Layer. The CONSULTANT will include signing design necessary for Southbound traffic to be on the Northbound Lanes during the construction of the Southbound Lanes and Greenway project.

7. The CONSULTANT's design will include temporary traffic signal poles (wood) with signal heads mounted on span-wire for the Southbound traffic that will be on the Northbound Lanes during construction of the Southbound Lanes and Greenway. Permanent traffic signal poles and signal heads will be mounted on mast arms for the Northbound and Eastbound approach traffic. The following are the signalized intersections that will be designed for these temporary traffic signal installations as part of the Northbound Lanes project are: Nature's Way, Edgewater Drive, and Mountainbrook Blvd.
8. The CONSULTANT will revise the Paving Layout sheets to include only the finished product of the Northbound Lanes and Temporary Tie-Ins construction.
9. The CONSULTANT will revise the Utility Sheets to include only the Northbound Lanes construction plans.
10. The CONSULTANT's design will include required temporary drainage and ditching necessary to ensure appropriate drainage is maintained as part of the Northbound Lanes construction project. Temporary median ditching will be adequate to handle the 5-year Design Storm event with a check/evaluation of the 10-year Design Storm event.
11. The CONSULTANT will revise the Drainage Layout Sheets, Drainage Cross-Sections, and Hydraulic Calculations as needed to include only the items and details necessary for construction of the Northbound Lanes.

12. The CONSULTANT will revise the Traffic Control Plans, Sequence of Construction, and Traffic Control Phasing, Signing, and Details required to construct Northbound Lanes.
 13. The CONSULTANT will revise the Erosion and Sediment Control Phasing and Design plans as needed to construct the Northbound Lanes.
 14. The CONSULTANT will revise the Cross-Section Sheets to reflect only construction of the Northbound Lanes project. Temporary Tie-In slopes will be included. The Cross-Sections will include temporary ditching and temporary roadway and entrance tie-ins.
 15. The CONSULTANT will update all required pay items and quantities to include only those items and quantities necessary to construct the Northbound Lanes project. All summary box sheets, summary of quantities sheets, and construction cost estimate will be updated accordingly.
 16. The CONSULTANT will prepare a revised NOI and CBMPP to reflect only the construction required for the Northbound Lanes.
 17. The CONSULTANT will ensure the revised design plans allow for convenient tie-ins to the Northbound Lanes project to both the Martin Road / Zierdt Road Intersection Construction Project and the Zierdt Road / Madison Boulevard Intersection Construction Project.
-

ALDOT STANDARD ROADWAY CONTRACT PLANS SCOPE OF SERVICES:

The CONSULTANT will perform the following as applicable:

1. The development of the plans will follow the procedure as shown in the STATE's "Guide for Developing Construction Plans" and "Guidelines For Operation."
2. The CONSULTANT will prepare a contract plans assembly for the Grade, Drain, Base, Pave, and Traffic Signals for construction of the Zierdt Road Northbound Lanes from North of Martin Road to South of Madison Blvd.
3. The CONSULTANT will prepare plans, project notes, miscellaneous project details, and special project details for the project to obtain approval of the CITY, STATE, RSA, and FHWA for the construction of the Northbound Lanes to include Design of the Temporary Roadway Tie-Ins, Temporary Drainage, Temporary Traffic Signals, and the Roadway Lighting. Environmental Commitments for the project are attached as Appendix "A".

4. Each project Plan Assembly will include title, summary of quantities, typical sections, special project details, plan and profile sheets, clearing and grubbing sheets, erosion prevention and sediment control sheets, and other sheets required for all construction work to be performed under this project. The plans will show all existing topographical features, natural and man-made, surface and subsurface facilities for the area included in the proposed construction limits and an area of sufficient detail for construction in accordance with current design layout.
5. The CONSULTANT will prepare designs and detailed contract plans at horizontal scale of $1" = 50'$ and vertical scale of $1" = 5'$, or as otherwise approved by the CITY/STATE. The plans will be completely dimensioned for construction. Special drawings for project details, drawings relevant to the Environmental Commitments, and other drawings required by the CITY/STATE will be prepared for the project as needed.
6. Arrangements will be made by the CITY/STATE with any affected utility owner so they can prepare plans for any utility relocation. Following the Plan-In-Hand Inspection, the CONSULTANT will provide utility base sheets to the CITY/STATE showing existing utilities for the CITY/STATE's use and coordination with the utility companies. The finalized utility base sheets will be a part of the respective final plan assembly for the project.
7. The applicable provisions of the ALDOT Standard Specifications for Highway Construction, 2012 Edition will apply to all work performed by the CONSULTANT under this AGREEMENT and the CONSULTANT will prepare supplemental specifications and special provision for approval of the CITY/RSA/STATE covering any needed items not covered by the ALDOT Specifications for Highway Construction, latest Edition.
8. The CONSULTANT will prepare estimates of quantities and construction cost for contract plans, itemized and properly symbolized in accordance with the Standard Specifications above noted, using unit prices as supplied or approved by the CITY/STATE on projects of comparable work in the general area of the project. Upon completion of the plans, copies of the Quantity Computations will be furnished the CITY/STATE, if requested.
9. Preliminary detailed plans and estimates for project shall be submitted to CITY/STATE/RSA before the final tracings are completed. CONSULTANT will prepare Traffic Control Plans for handling traffic during construction. The sequence of construction will be prepared to ensure RSA security is maintained. RSA physical security personnel must approve the construction of the new security fence before removal of the existing security fence.
10. The CONSULTANT will coordinate these plans with existing and proposed plans of the CITY/STATE; provided the CITY/STATE provides CONSULTANT information.

11. CONSULTANT will prepare plans using size and weight of pens and other drafting techniques to facilitate development of one half (1/2) scale drawings.
12. Following Combined Plan-In-Hand/PS&E Inspection, CONSULTANT will make appropriate revisions to plans, submit a set of reproducible plans along with the corresponding CADD utility files for use of the CITY/ALDOT in obtaining utility relocation information.
13. After the Combined Plan-In-Hand/PS&E review, CONSULTANT will prepare a revised right-of-way map (if needed) showing any additional permanent & temporary easements and submit to CITY/STATE with preliminary plans showing construction limits for use by the CITY/STATE.
14. CONSULTANT will prepare and submit eight (8) sets of plans (ATRIP Project) for a PS&E Inspection as required by ALDOT's Guide for Developing Construction Plans. Additional reviews may be required if determined necessary CITY/STATE.
15. CONSULTANT will prepare, perform, and submit the plans, information, and data necessary to obtain a Stormwater Permit for the project. CONSULTANT will include within the plans assembly phased erosion prevention and sediment control plans for each phase of construction. CONSULTANT will prepare a written CBMPP plan and obtain approval of CBMPP plan for the Project. The CITY will be responsible for payment of the required Stormwater Permit fees for the project.
16. After plan revisions have been made CONSULTANT will submit three (3) sets of prints of plans to the CITY/STATE for review and approval prior to final contract plans submittal. Construction cost estimates will be furnished with the P.S. & E. and final plan submittals.
17. Following CITY/RSA/STATE review and approval of the final contract plans, the CONSULTANT shall submit a complete final plan assembly for the project printed on Mylar to the CITY/STATE. The Final Mylar project plan assembly set shall be stamped and signed by the Professional Engineer licensed in the State of Alabama and who was responsible for managing the design and development of the project plan assembly.

**PROJECT: STPHV-8507(600)
WIDENING CR-7 (ZIERDT ROAD) FROM SOUTH OF CR-11 (MARTIN ROAD)
TO NORTH OF MADISON BOULEVARD (SR-20)
MADISON COUNTY, ALABAMA**

Environmental Commitments for the FONSI

Environmental commitments for this project are as follows:

- A 12-ft greenway with bike lanes will be built about 7-ft west of Zierdt Road's existing western edge of pavement for pedestrians and bicyclists. "Share the Road" signs will be provided along Zierdt Road as part of this project to accommodate cyclists who elect to share the road with motorists instead of using the greenway.
- Redstone Arsenal security must be maintained. Contractor must sequence the construction of all clearing, grubbing, grading, new security fence, and drainage east of the existing security fence with RSA physical security personnel until they are complete. The existing security fence must not be removed until construction of the new security fence is complete and RSA physical security has approved removal of the existing security fence.
- ~~All tree removal activities within RSA boundaries must be coordinated with the Army Garrison Forester per Army Regulation 200-1. Forest products will not be given away, abandoned, destroyed, traded, used to offset costs, or otherwise removed from Army lands except by commercial sale. All forest products must be accounted for and all harvests completed before construction can proceed.~~
- The Bobcat Cave Ecologically Sensitive Area (ESA) is east of Zierdt Road (Sta 76+00 to 115+00) from present east ROW line about 0.5 miles east. Bobcat Cave is 1200-ft east of Zierdt Rd in a groundwater group linked to Betts Spring Branch/Lady Ann Lake/areas west of RSA. It is a known habitat for the federally endangered Alabama Cave Shrimp. Shallow groundwater supply area of 200-acres represents the ESA watershed. Area groundwater usually flows south to the Tennessee River; but, shallow groundwater in the upper recharge area flows north to Betts Spring Branch. The surface recharge area of Bobcat Cave ESA must be protected. Area surface drainage generally flows north to a second cave hydraulically connected to Bobcat Cave. Impacts to the Alabama Cave Shrimp must be avoided. These guidelines must be followed:

Project: STPHV-8507(600)
 Widening CR-7 (Zierdt Road) from South of CR-11 (Martin Road)
 To North of Madison Boulevard (SR-20)
 Environmental Commitments
 Madison County
 December 6, 2011
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- Erosion Control measures will be used to prevent erosion and sedimentation from affecting either cave. All disturbed soils will be re-seeded in accordance with the ALDOT's Erosion Control Plan.
- Pesticide, herbicide, or toxic substance use is not allowed in the ESA.
- No equipment, petroleum products, or hazardous materials will be left overnight in Bobcat Cave ESA. No maintenance, fueling operations, or hazardous material use will occur in the ESA. Spill kits will be kept on site in case of a leak, release of petroleum, or other hazardous material.
- Access to Bobcat Cave is prohibited.
- BMP's must be used and incorporated in CMBPP to minimize erosion and sedimentation of drainage features and topographic depressions (karst features) near the project. Designs, specifications, installations, maintenance, inspection and reporting must follow ALDOT internal policies and guidance, as well as regulatory permitting requirements.
- No surface drainage runoff will be directed to Bobcat Cave ESA. All stormwater runoff/discharge will be directed west; away from Bobcat Cave ESA. Stormwater will not be dumped in depressions; it will be managed to prevent changes in groundwater flow east of Zierdt Road.
- **Site RSA-278 (in northwest corner of RSA, east of Zierdt Rd near I-565 and Madison Blvd) is a Comprehensive Environmental Response, Compensation, Liability (CERCLA) superfund site in the Installation Restoration Program (IRP) & Military Munitions Response Program (MMRP); therefore, these areas and all material contained within these areas are subject to the following regulations:**
 - IRP must be given Final Plans to estimate/secure funds to provide on-call UXO support staff required for activities in the MMRP to ensure the project is built in a safe environment. Contact the RSA Garrison Safety Officer to coordinate required UXO removal/clearance by IRP before starting work. IR Branch must be contacted one week before starting work. The Contractor will be responsible for

Project: STPHV-8507(600)
 Widening CR-7 (Zierdt Road) from South of CR-11 (Martin Road)
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any costs associated with project changes after IRP secures/remedies funding for their support.

- All spoils/materials from the MMRP site must be coordinated with the IR Branch for determination of proper disposal methods.
- The IRP/MMRP Work Plan Evaluation Checklist and boundary maps of CERCLA site RSA-278 and RSA Property must be provided to the contractor (Attached in Appendix K of the Environmental Assessment.) The contractor must keep these on-site and follow them during construction. All workers must attend a two-hour briefing by Garrison Safety Officer. They must be informed of contents in the IR Checklist and CERCLA site description.
- No groundwater to surface pumping/discharge is allowed without sampling and ~~Environmental Management Division approval.~~ The Installation Groundwater Land Use Control guide must be followed. (Appendix K.)
- All soil required for the project will be from a site off Redstone Arsenal. All soil taken from Army property must be coordinated with IRP and Redstone.
- To prevent impacts to Site IMA1549, clearing activities within the site boundary will be completed by hand with no intrusion below the plow zone. Phase II Archaeological testing is no longer required to be performed. This area (approximately Sta 113+20 to 113+90) and any work to be performed in this area should be coordinated with Ben Hoksbergen (256-876-6122) with Redstone Arsenal one week prior to commencement and is subject to the following regulations:
 - Impacts to any intact archaeological deposits will not be permitted. Since the upper approximately 8 inches (20 cm) of soil on the site in question has been previously disturbed, the archaeological deposits in that zone are no longer in primary context, and further impacts to that zone will have minimal effect on the integrity of the cultural resource. Therefore, impacts to the sites as a result of timber clearing shall be restricted to this zone. No impacts shall be permitted below 8 inches (20 cm) below ground surface.

Project: STPHV-8507(600)
Widening CR-7 (Zierdt Road) from South of CR-11 (Martin Road)
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- In order to minimize impacts below the plow zone, any timber clearing activity conducted on potentially NRHP eligible archaeological sites, including the driving of heavy machinery, the felling of trees, and the dragging of felled trees, shall be conducted only after a minimum of one week (7 days) after the last rain fall in quantities of half an inch (12.7 mm) or more.
- No timber clearing activity shall be conducted on portions of potentially NRHP eligible archaeological sites subject to high water table or similar conditions. These areas could exhibit soft ground conditions which could be easily rutted by heavy machinery or drag trees.
- All cultural features visible at the surfaces of potentially NRHP eligible archaeological sites including such features as chimney bases, foundations/piers, wells, cellars, or cisterns on historic sites and rock shelters, rock art, and mounds on prehistoric sites shall be strictly avoided during timbering activity. A buffer of at least 20 feet (6 m) shall be maintained around each feature.
- In general, vehicle traffic, including but not limited to heavy machinery, shall be minimized to the greatest extent practical on any potentially NRHP eligible archaeological site. Access roads shall not be established over or within 50 feet of NRHP eligible archaeological sites.
- Decking areas shall not be located on or within 50 feet of any NRHP eligible archaeological site.

ATTACHMENT 2 - ALABAMA IMMIGRATION ACT - REPORT OF OWNERSHIP FORM

CITY OF HUNTSVILLE, ALABAMA REPORT OF OWNERSHIP FORM

A. General information. Please provide the following information:

- Legal name(s) (include "doing business as", if applicable): GARVER, LLC
- City of Huntsville current taxpayer identification number (if available): 4755
(Please note that if this number has been assigned by the City and if you are renewing your business license, the number should be listed on the renewal form.)

B. Type of Ownership. Please complete the un-shaded portions of the following chart by checking the appropriate box below and entering the appropriate Entity I.D. Number, if applicable (for an explanation of what an entity number is, please see paragraph C below):

Type of Ownership (check appropriate box)	Entity I.D. Number & Applicable State
<input type="checkbox"/> Individual or Sole Proprietorship	
<input type="checkbox"/> General Partnership	
<input type="checkbox"/> Limited Partnership (LP)	Number & State:
<input type="checkbox"/> Limited Liability Partnership (LLP)	Number & State:
<input type="checkbox"/> Limited Liability Company (LLC) (Single Member)	Number & State:
<input checked="" type="checkbox"/> LLC (Multi-Member)	Number & State: <u>136653 - AL</u> <u>01 - 0733400 - EIN</u>
<input type="checkbox"/> Corporation	Number & State:
<input type="checkbox"/> Other, please explain:	Number & State (if a filing entity under state law):

710309583
AL TAX ID

- C. Entity I.D. Numbers.** If an Entity I.D. Number is required and if the business entity is registered in this state, the number is available through the website of Alabama's Secretary of State at: www.sos.state.al.us/, under "Government Records". If a foreign entity is not registered in this state please provide the Entity I.D. number (or other similar number by whatever named called) assigned by the state of formation along with the name of the state.
- D. Formation Documents.** Please note that, with regard to entities, the entity's formation documents, including articles or certificates of incorporation, organization, or other applicable formation documents, as recorded in the probate records of the applicable county and state of formation, are not required unless: (1) specifically requested by the City, or (2) an Entity I.D. Number is required and one has not been assigned or provided.

Please date and sign this form in the space provided below and either write legibly or type your name under your signature. If you are signing on behalf of an entity please insert your title as well.

Signature: [Signature]
Type or legibly write name: JERRY D. McCARLEY

Title (if applicable): Regional Office Administrator
Date: 1/6/12

ATTACHMENT 3
CITY OF HUNTSVILLE STANDARDS AND DESIGN GUIDES

1. City of Huntsville Standard Specifications for Construction of Public Improvements. Contract Projects, 1991.
2. City of Huntsville Engineering Standards, 1991.
3. City of Huntsville Design and Acceptance Manual for Force Mains and Pump Stations, 2011.
4. City of Huntsville Design and Acceptance Manual for Sanitary Sewers, 2011.
5. Alabama Department of Transportation Standard Specifications for Highway Construction, Current Edition.
6. City of Huntsville Subdivision Regulations, 1991.

ATTACHMENT 4 **DESIGN REVIEWS**

0% COMPLETE – PRE-DESIGN CONFERENCE

The ENGINEER shall meet with the OWNER at a 0% complete - Pre-Design Conference. The OWNER's representative (Project Engineer) will be introduced.

CONFERENCE FORMAT

The pre-design meeting will be initiated by the OWNER. The purpose of the conference will be to give the ENGINEER an opportunity to discuss the design of the PROJECT, to visit the PROJECT site, to receive copies of OWNER -furnished documents, if applicable, and to meet the OWNER'S Project Engineer and other personnel working on the PROJECT.

ATTENDEES: (Required)

- ENGINEER
- LANDSCAPE Management
- ALDOT (as appropriate
for the type of project)
- Utilities
- Real Estate
- Traffic Engineering
- Planning

DISCUSSION TOPICS :

- Authority of OWNERS representative (Written submittal made to the ENGINEER)
- Tree Ordinance
- Scope of Work
- Time Requirements
- Budget Restraints
- Testing Requirements
- Permit Responsibilities
- Design criteria
- LC&E requirements
- Plan Requirements
- Special Conditions
- Utility Project Notification and a list of all utilities that need to be contacted.

REQUIRED SUBMITTALS TO THE PROJECT ENGINEER

1. A Certificate of Insurance for the ENGINEER and the ENGINEER's subconsultants shall be submitted to the OWNER's PROJECT ENGINEER per Section 10.6.
2. Prior to the Pre-Design Conference, a completed **draft** design criteria document shall be prepared to the best of the ENGINEER'S ability and in conformance with his fee proposal and will serve as the basis of a discussion topic during the Pre-Design Conference. A **final** version of the design criteria based upon discussion during the meeting shall be prepared by the ENGINEER and distributed with the meeting minutes. A copy of a design criteria format may be found on the City of Huntsville web site at <http://www.huntsvilleal.gov/engineering/index.php>.
3. Within seven (7) calendar days of the 0% Complete - Pre-Design Conference, the ENGINEER shall submit to the OWNER's Project Engineer two color copies and an electronic copy of a schedule in Microsoft Projects format showing the critical path and indicating the time frame for the required milestone events and submittals outlined in this document. The schedule shall support a PROJECT completion date in accordance with the Period Of Services in Article 6. When approved, a baseline of the schedule shall be saved from which variances in the schedule can be measured and evaluated.

ATTACHMENT 4 **DESIGN REVIEWS**

30% COMPLETE – CONCEPTUAL DESIGN

This design review is to show the OWNER how the functional and technical requirements will be met, to indicate the ENGINEER's approach to the solution of technical problems, to show compliance with design criteria or to justify noncompliance and to provide an estimate of probable cost. A field review shall be conducted at this juncture with the OWNER's staff and the ENGINEER to review the proposed field alignment of the PROJECT.

CONFERENCE FORMAT

ATTENDEES: (Required)

- Real Estate
- Landscape Management
- Utilities
- Traffic Engineering
- Planning
- City of Huntsville Construction Project Manager
- City of Huntsville Inspector
- City of Huntsville Environmental Representative

DISCUSSION TOPICS:

- ENGINEER presents recommended design/solutions along with other options and alternatives considered.
- ENGINEER presents updates on progress of permitting requirements
- ENGINEER presents progress on coordination with other project participants such as the State of Alabama, sub consultants, etc.
- ENGINEER presents budgetary constraints

REQUIRED SUBMITTALS TO THE PROJECT ENGINEER

1. A preliminary list of all permits to be obtained with associated fees.
2. An updated schedule in Microsoft Projects format showing the critical path shall be submitted.
3. Two color copies and an electronic copy of an updated schedule in Microsoft Projects format showing the critical path shall be submitted.

ATTACHMENT 4 **DESIGN REVIEWS**

60% COMPLETE – PRELIMINARY DESIGN CRITERIA

The review of the PROJECT at this point is primarily to insure that funding limitations are not being exceeded and to insure that the contract documents, design analysis and cost estimates are proceeding in a timely manner, and that the design criteria and previous review comments are being correctly interpreted. An additional review may be required by the OWNER to review changes proposed from previous submittals.

CONFERENCE FORMAT

ATTENDEES: (Required)

- Real Estate
 - Landscape Management
 - Utilities
 - Traffic Engineering
 - Planning
-
- City of Huntsville Construction Project Manager
 - City of Huntsville Inspector
 - City of Huntsville Environmental Representative

DISCUSSION TOPICS:

- Additional land acquisition needs, as required.
- Utility Project Notification and a list of all utilities that need to be contacted.
- Technical specifications for special construction items not covered under standard specifications or deviations from standard specifications.
- Update on progress of permitting requirements.
- Erosion control plan requirements, if required by the OWNER.
- Budget constraints.
- Progress on coordination with other project participants such as the City of Huntsville Real Estate Officers (Engineering Department), State of Alabama, sub consultants, etc.

REQUIRED SUBMITTALS TO THE PROJECT ENGINEER

1. One full size print copy and one ½ size print copy of all drawings that have incorporated previous comments shall be submitted. Plan/Profile drawings shall be 75% complete. Right-of way drawings shall be 100% complete at this submittal (reference Real Estate Division Plan Requirements Section entitled DRAWINGS, included at the end of this proposal)
2. An update to the schedule in Microsoft Projects format showing the critical path shall be submitted.
3. Unless determined to be inapplicable by the OWNER, Hydraulic reports 75% complete, shall be submitted.
4. Three (3) copies of preliminary plans for utilities shall be submitted.
5. Legal descriptions for takings shall be submitted. The information shall be 100% complete. (reference Real Estate Division Plan Requirements Section entitled DESCRIPTIONS, included at the end of this proposal)
6. Traffic Control Plan, if required. Plan shall be 60% complete at this submittal.
7. Detailed preliminary construction cost estimate shall be submitted.
8. Results of geotechnical investigations shall be submitted.
9. A list of comments made at the 30% review and a summary of each resolution.
10. Two color copies and an electronic copy of an update to the schedule in Microsoft Projects format showing the critical path shall be submitted.

ATTACHMENT 4 **DESIGN REVIEWS**

90% COMPLETE – FINAL REVIEW

The review of this submittal is to ensure that the design is in accordance with directions provided the ENGINEER during the design process.

CONFERENCE FORMAT

DISCUSSION TOPICS

Discussion topics will be handled open forum.

REQUIRED SUBMITTALS TO THE PROJECT ENGINEER

1. One full size print copy and one ½ size print copy of all drawings that have incorporated previous comments shall be submitted. Submittals include Plan/Profile drawings, Construction Details, Detailed cross-sections with cut and fill quantities and storm and sanitary sewer crossings, Erosion control plan, if required, Technical specifications, Right-of way drawings, Traffic Control Plan, Plans for Utilities, Signed Acceptance of Utility Project Notification Form by all affected parties, Design Calculations, and a final cost estimate. All submittals shall be 100% complete.
2. Any changes to Land Acquisition needs shall be identified and Legal descriptions for the changes shall be submitted.
3. A list of comments made at the 60% review and a summary of each resolution.
4. Calculations showing how quantities were determined for each bid item and how the item is to be measured in the field and paid. Three bound copies of corrected quantity calculations to match bid quantities. The following shall be required for each item:
 - Item Number
 - Item Description with standard specification used
 - Detailed calculation to include all measurements, conversion factors, and "standard" weights used
 - Final "calculated" amount and any "increased" amounts
 - Notes to include any deviation from referenced standard specifications

ATTACHMENT 4
DESIGN REVIEWS

100% COMPLETE – READY TO ADVERTISE

After the 90% review, the ENGINEER shall revise the construction documents by incorporating any comments generated during the previous design reviews. The ENGINEER shall prepare final hard copy contract specifications, prepare a bid form, and update the cost estimate as necessary.

ATTACHMENT 5 - ENGINEERS PERSONNEL FEE SCHEDULE

Garver, LLC

2014 Hourly Rate Schedule*VALID FOR DURATION OF THIS CONTRACT***Classification****2014****Rates****Engineers / Architects**

	M-1	300.00
	E-6	215.00
Scott C. Leach, PE	E-5	176.00
	E-4	140.00
Patra Crenshaw, Andy Dinges, Zack Turner	E-3	123.00
	E-2	111.00
Kendall Brown, El	E-1	91.00

Planners

P-2	132.00
P-1	110.00

Designers

D-4	138.00
D-3	116.00
D-2	107.00
D-1	82.00

Technicians

	T-3	102.00
Amanda Mason	T-2	87.00
	T-1	76.00

Surveyors

S-6	163.00
S-5	111.00
S-4	90.00
S-3	67.00
S-2	52.00
S-1	41.28
1-Man Crew (Survey)	133.00
2-Man Crew (Survey)	160.00
3-Man Crew (Survey)	198.00
2-Man Crew (GPS Survey)	178.00
3-Man Crew (GPS Survey)	215.00

Construction Observation

C-4	192.00
C-3	152.00
C-2	112.00
C-1	83.00

Administration

	M-1	262.00
	X-4	108.00
Cheryl South	X-3	83.00
	X-2	62.00
Peggy Bridgeman, Liz Aaron	X-1	47.00

Intern

I-1	47.00
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ATTACHMENT 6 - PROGRESS REPORT
(Article 8)

PROGRESS REPORT NO. _____ FOR MONTH AND YEAR _____

PROJECT _____ PROJECT NO. _____

DATE _____ CITY'S PROJECT ENGINEER _____

CONSULTANT _____ CONSULTANT'S PROJ. MAN. _____

CURRENT MONTH % COMPLETE: _____ PREV. MONTH % COMPLETE: _____

ATTACH A "SHOULD HAVE STARTED TASKS REPORT" AND A "SLIPPING TASKS REPORT" FROM MICROSOFT PROJECTS THAT LISTS ALL ACTIVITY THAT IS BEHIND SCHEDULE.

ATTACH A "TASKS STARTING SOON" REPORT FROM MICROSOFT PROJECTS WITH A DATE RANGE OF THIRTY (30) DAYS AFTER THE DATE OF THIS PROGRESS REPORT.

STATE WHAT ACTION IS BEING TAKEN TO BRING PROJECT BACK TO SCHEDULE:

	MILESTONE SUBMITTALS	SCHEDULED DATE	ACTUAL DATE
	30%	_____	_____
	60%	_____	_____
	90%	_____	_____
	100%	_____	_____
	"FINAL" INVOICE SUBMITTED	_____	_____
	SUBCONSULTANTS PAID IN FULL	_____	_____
	CONTRACTED COMPLETION DATE: December 31, 2014	_____	_____

(These scheduled dates shall be agreed upon at the beginning of the project (Attachment 4) with the Project Engineer and noted monthly on each progress report. The scheduled contract completion date shall not be changed except by contract change order. Changes to the scheduled milestone submittal dates shall be accompanied by a new project schedule approved by the OWNER'S Project Engineer.)

UPDATED SCHEDULE ATTACHED? _____ YES _____ NO

*If yes, send an electronic copy to the Project engineer

COMMENTS:

This progress report (4 copies) shall be submitted monthly. Scheduled completion dates will not be extended without a contract modification.

CERTIFICATION: I certify that the stated information is true and accurate to the best of my knowledge.

CONSULTANT	DATE	CITY PROJECT ENGINEER	DATE
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ATTACHMENT 7 - SUB CONSULTANTS ENGAGED BY THE ENGINEER
(Article 9.2)

CONSULTANT NAME AND ADDRESS	DESCRIPTION OF SERVICES	FEE
	N/A	
	SUB-TOTAL	
	5% Administrative Fee	
	TOTAL	

ATTACHMENT 8 - CONTRACT DOCUMENT REQUIREMENTS LIST

REQUIREMENT	SUBMIT TO	SUBMITTAL REQUIREMENT DATE	NUMBER OF COPIES	REFERENCE SECTION OF CONTRACT AND COMMENTS
Deviations from OWNER's standards.	OWNER	Prior to incorporating deviations.	2	Article 2.5
Products or materials specified by the ENGINEER that are available from only one source.	OWNER	Prior to 100% submittal.	2	Article 2.2
Approval of ENGINEER's Request for Payment.	OWNER	Within ten (10) days of receipt of the request from the ENGINEER.	N/A	Article 3.4
Approval of ENGINEER submittals	OWNER	So as to cause no delay to the ENGINEER or the PROJECT.	N/A	Article 3.8
Change order changes that reduce construction requirements.	OWNER	Prior to authorizing a change.	N/A	Article 3.11
Any information pertaining to any claim.	OWNER	Immediately	2	Article 3.12
Information pertinent to the PROJECT, all criteria and full information as to OWNER's requirements, copies of all design and construction standards.	ENGINEER	So as to not delay the services of the ENGINEER.	2	Article 5.1, 5.2
Notification of delays.	ENGINEER; OWNER	Promptly	4	Article 6.1
ENGINEER's monthly invoices.	OWNER	Monthly	4	Article 8.1.1
Consultant progress report.	OWNER	Monthly	4	Article 8.1.1
Records, data, parameters, design calculations and other information.	OWNER	Cancellation of contract.	2	Article 9.7
Documentation, records of reimbursable expenses, record copies of all written communications, and any memoranda of verbal communications related to the PROJECT.	OWNER	Upon notice from the OWNER.	2	Article 9.4
Termination notification.	OWNER or ENGINEER	7 days prior to termination.	2	Article 9.10 & 9.11
Certificate of Insurance for ENGINEER.	OWNER	At 0% design conference	1	Article 10.2(B), 10.6, and Attachment 4.
Insurance cancellation, suspension, or reduction in coverage or limits.	OWNER	30 days prior to effective date except for cancellation which is 10 days notification.	1	Article 10.4(A)

Certificate of insurance for sub consultants/subcontractors.	OWNER	At 0% design conference.	1	Article 10.7
A schedule in Microsoft Projects format showing the critical path.	Project Engineer	Within 7 calendar days of Pre-design conference, 30% complete design review. 60% design review Attachment 6	1 hard; 1 digital	Attachment 4
Drawings.	Project Engineer	30% complete design review, 60% design review, 90% review, and 100% complete.	3	Attachment 4
Cost estimate.	Project Engineer	30% complete design review, 60% review, 90% review, and 100% complete.	3	Attachment 4
Hydraulic reports.	Project Engineer	60% design review.	2	Attachment 4
Preliminary plans for utilities.	Project Engineer	60% design review.	3	Attachment 4
Real Estate Deliverables	Project Engineer	60% design review, 90% review, 100% complete.	Reference Real Estate Division Plan Requirements	Attachment 4, 14 Real Estate Plan Requirements at end of this proposal document
Traffic Control plan.	Project Engineer	60% design review.	N/A	Attachment 4
Results of geotechnical investigations.	Project Engineer	30% design review.	2	Attachment 4
Technical specifications.	Project Engineer	90% review, 100% complete.	N/A	Attachment 4
Relocation of Utilities	Project Engineer	0% review – list of all utilities that need to be contacted 60% review – from all affected parties 90% review – Signed Acceptance Utility Project Notification Form	2	Attachment 4, 10
Design Calculations	Project Engineer	90% review, 100% complete	1	Attachment 4
Digital copy of drawings.	Project Engineer	100% complete – 1 in .dgn format; 1 in .tiff or .pdf format	2	Attachment 4
Digital text files.	Project Engineer	100% complete.	1	Attachment 4
Bid Quantities.	Project Engineer	100% complete. Digital in Excel 2003 format and hard copy	3	Attachment 4
Permits and Permit Applications	Project Engineer	100% complete.	1	Attachment 4
Field notes.	Project Engineer	100% complete.	1	Attachment 4
Digital aerial photography.	Project Engineer	100% complete.	1	Attachment 4
Progress Report (Art. 8)	Project Engineer	30% complete design review, 60% design review, 90% design review, 100% completion stage.	4 hard; 1 digital monthly	Attachment 4

ATTACHMENT 9 - REQUIREMENTS FOR DOCUMENT SUBMITTALS

DRAWINGS

All drawings shall be sized 24" x 36", unless otherwise approved by the OWNERS Project Engineer.

Title blocks shall as a minimum, contain the name of the project, date, city project number, and ENGINEER's name. The title block of drawings shall contain a space for the names of the preparer and the reviewer and/or checker. These blocks shall be signed on each submittal (See Attachment "11" for sample standard drawing format). Drawings shall contain alphanumeric revision designations. Drawings issued for review shall be issued with alpha revision designation and the revision letter shall be changed for each submittal containing drawing changes. Drawings issued for construction shall be issued with numeric designation at revision level "0" and described as "Issued for Construction" in the revision description block. Subsequent drawing changes require the revision level to be raised using successively higher numbers and the changes to be marked by circling and briefly described in a revision block.

All drawings shall be prepared in Micro station .DGN format, unless otherwise approved by the OWNERS Project Engineer. Transmittal letters shall consist of a list of files being submitted, a description of the data in each file, and a level/layer schematic of each design file. DGN design files shall have working units as follows: master units in feet, no sub-units, and 1,000 positional units. All data submitted shall use NAD 1983 Alabama East Zone horizontal datum and NAVD 88 vertical datum coordinates.

Unless otherwise specified by the Owners Project Engineer, all drawings for review submittals shall be full or half-size copies. ~~All documents shall be clearly marked in a revision block indicating the applicable submittal milestone, i.e. 30%, 60%, 90%, etc.~~

OTHER DOCUMENTS

Submittals required by the State of Alabama for their review, bidding, etc., shall be of the size, form and numbers of copies as the state may require even though such submittals may differ from the submittals set forth as being required elsewhere in this Agreement.

Digital files shall be submitted by 4-3/4" CD ROM, DVD, 3 and 1/2 inch floppy disk, flash drive, or to the City of Huntsville F.T.P. site.

All print copies shall be first generation copies.

All text documents shall be prepared in Microsoft Word 2010 format.

All spreadsheets shall be in Microsoft Excel 2010 format.

All PDF files shall be searchable.

Schedules shall be in Microsoft Projects format, unless otherwise approved by the OWNERS Project Engineer.

Aerial photography files shall be in Intergraph (.COT) or (.tiff) format.

All mapping shall meet National Map Accuracy Standards unless otherwise noted. If National Map Accuracy Standards are not met, the accuracy of the map shall be identified to the Owners Project Engineer and on the maps derived from the aerial survey. National Map Accuracy Standards are shown below. This and other map standards are shown in Department of the Army, US Army Corps of Engineers standard, "EM 1110-1-1000, Engineering and Design - Photogrammetric Mapping".

All final drawings, specifications, plans, calculations, letters containing Engineering or Surveying recommendations or other Engineering or Land Surveying papers or documents involving the practice of engineering or land

surveying as defined by Code of Alabama, Title 34, Chapter 11 shall be sealed, dated, and bear the signature of the person who prepared or approved them.

Working drawings or other documents shall contain a statement to the effect "Preliminary-Not for construction, recording purposes or implementation."

ATTACHMENT 10 – UTILITY PROJECT NOTIFICATION FORM

NAME: _____
(Utility Name)

PROJECT NAME: _____ PROJECT NUMBER: _____

CONSULTING ENGINEER: _____
(Name)

ENGINEERING REPRESENTATIVE _____ PHONE: _____

I have reviewed design drawings or other information as available, and:

DO _____

DO NOT _____

have facilities that will require relocation. If relocation is required, a construction duration of _____
~~calendar days from the Notice to Proceed, is anticipated to be required for relocation.~~

LIST NAME(S) OF OTHER UTILITY(S) that share poles or facilities that have to be relocated prior to YOU
starting your work:

NAME OF UTILITY: _____

NAME OF UTILITY: _____

NAME OF UTILITY: _____

OTHER: _____

COMMENTS: _____

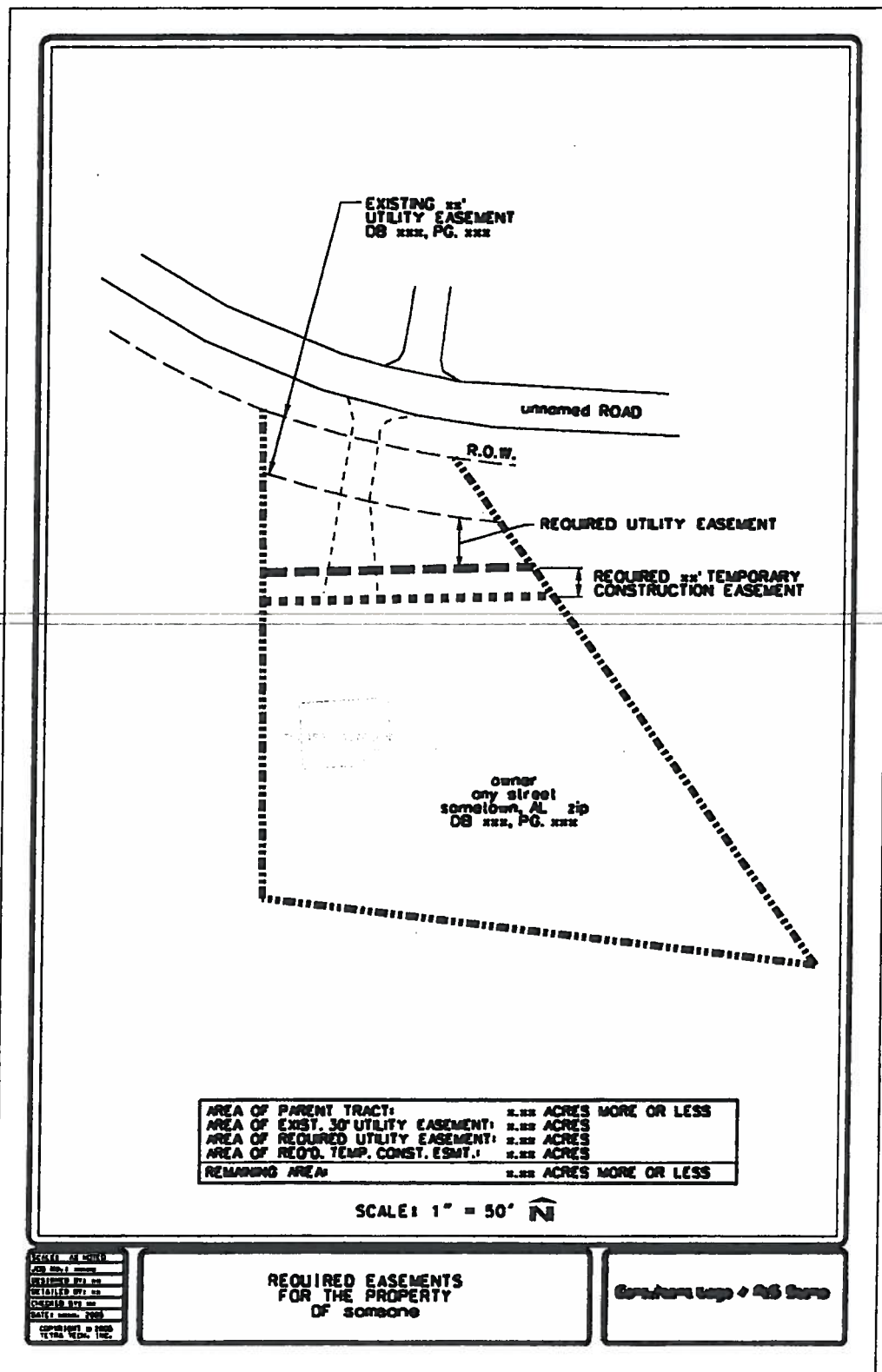
BY: _____
AUTHORIZED REPRESENTATIVE

FIELD CONTACT PERSON: _____ PHONE: _____

OFFICE CONTACT PERSON: _____ PHONE: _____

DATE: _____

ATTACHMENT 12
SAMPLE



ATTACHMENT 13

United States National Map Accuracy Standards

With a view to the utmost economy and expedition in producing maps which fulfill not only the broad needs for standard or principal maps, but also the reasonable particular needs of individual agencies, standards of accuracy for published maps are defined as follows:

1. **Horizontal accuracy.** *For maps on publication scales larger than 1:20,000, not more than 10 percent of the points tested shall be in error by more than 1/30 inch, measured on the publication scale; for maps on publication scales of 1:20,000 or smaller, 1/50 inch. These limits of accuracy shall apply in all cases to positions of well-defined points only. Well-defined points are those that are easily visible or recoverable on the ground, such as the following: monuments or markers, such as bench marks, property boundary monuments; intersections of roads, railroads, etc.; corners of large buildings or structures (or center points of small buildings); etc. In general what is well defined will be determined by what is plottable on the scale of the map within 1/100 inch. Thus while the intersection of two road or property lines meeting at right angles would come within a sensible interpretation, identification of the intersection of such lines meeting at an acute angle would obviously not be practicable within 1/100 inch. Similarly, features not identifiable upon the ground within close limits are not to be considered as test points within the limits quoted, even though their positions may be scaled closely upon the map. In this class would come timber lines, soil boundaries, etc.*
2. **Vertical accuracy,** *as applied to contour maps on all publication scales, shall be such that not more than 10 percent of the elevations tested shall be in error more than one-half the contour interval. In checking elevations taken from the map, the apparent vertical error may be decreased by assuming a horizontal displacement within the permissible horizontal error for a map of that scale.*
3. **The accuracy of any map may be tested** *by comparing the positions of points whose locations or elevations are shown upon it with corresponding positions as determined by surveys of a higher accuracy. Tests shall be made by the producing agency, which shall also determine which of its maps are to be tested, and the extent of the testing.*
4. **Published maps meeting these accuracy requirements** *shall note this fact on their legends, as follows: "This map complies with National Map accuracy Standards."*
5. **Published maps whose errors exceed those aforesaid** *shall omit from their legends all mention of standard accuracy.*
6. **When a published map is a considerable enlargement** *of a map drawing (manuscript) or of a published map, that fact shall be stated in the legend. For example, "This map is an enlargement of a 1:20,000-scale map drawing," or "This map is an enlargement of a 1:24,000-scale published map."*
7. **To facilitate ready interchange and use of basic information for map construction** *among all Federal mapmaking agencies, manuscript maps and published maps, wherever economically feasible and consistent with the uses to which the map is to be put, shall conform to latitude and longitude boundaries, being 15 minutes of latitude and longitude, or 7.5 minutes, or 3-3/4 minutes in size.*

U.S. BUREAU OF THE BUDGET

ATTACHMENT 14

ENGINEERING DEPARTMENT - REAL ESTATE DIVISION PLAN REQUIREMENTS

DRAWINGS:

Individual Parcels

- Each individual parcel 8 1/2" x 14" (dgn or dxf format)
- Show Calculations
 - Before
 - After
 - Taking
- All Parcels shall be closed shapes (polygons).
- Show Existing and Proposed Right-of-Way on each individual parcel map.
- Property Ownership

Overall Project Land Acquisition Maps

- Total project drawing in dgn or dxf format
- Indicate the following:
 - Stationing on Centerline
 - Existing Right-of-Way
 - Proposed Right-of-Way
 - Existing Easements
 - Proposed Easements
 - Existing Pavement
 - Proposed Pavement/Sidewalks/Structures
 - Existing Structures
 - Property Ownership

Color Standards

(SAMPLE)

<u>Description</u>	<u>Color</u>	<u>Line Style</u>	<u>Type</u>
Existing ROW	Red	Medium Dashed	
Proposed ROW	Red	Solid	Closed Polygon
Existing Easements	Orange	Medium Dashed	
Proposed Easements	Orange	Solid	Closed Polygon
TCE	Pink	Solid	Closed Polygon

DESCRIPTIONS:

- Microsoft Word on 3.5" Diskette or CD
- Each Description shall be complete and independent (separate file).
- Hard Copies signed and stamped by PLS.

GENERAL:

- P.K. Nails or other permanent stationing markings shall be required.
- Re-staking of right-of-way or easements may be required (See Article 4).
- All survey plats to be on Alabama State Plane Datum. Strip Maps shall indicate at least 2 monuments in place with Alabama State Plane Coordinate values shown on each.
- Parcel plats and legal descriptions shall indicate the Alabama State Plane Coordinate NAD83 Alabama East Zone Value of the point of beginning.

ATTACHMENT 15 - GIS BASE MAP

DESIGN LEVEL	CONTENTS	LINE CODE	COLOR	WEIGHT	TEXT SIZE	FONT	CELL NAME
1	State Plane Coordinate Grid	0	0	0	20	0	
2	Benchmarks	0	0	0			
3	Private Street Text	0	105	0	20	0	
3	Street Text	0	3	0	20 (or 18)	0	
4	Street R/W	7	0	0			
5	Street Centerline	7	0	0			
6	Street Pavement	0	3	0			
6	Proposed Street Pavement	3	16	0			
6	Private Streets	0	105	0			
6	Proposed Private Road	3	105	0			
7	Parking Lots	1	3	1			
7	Private Lots used as Roads	1	105	1			
8	Secondary Roads--Private	2	105	0			
8	Secondary Roads	2	3	0			
8	Trails	3	3	0			
9	Secondary Roads/Trails Text	0	3	0	20	0	
10	Sidewalks	5	3	0			
11	Bridges/Culverts/Paved Ditches	0	0	0			
12	Hydrology - Major	6	1	0			
12	Hydrology - Minor, Ditches	7	1	0			
13	Hydrology - Text	0	1	0	25	23	
14	Tailings & Quarries, Athletic Fields/Text, misc. areas	0	1	0			
15	Greenways	3	48	0			
16	Speed Tables	0	3	0			TCALM
17	Railroad Tracks (Patterned)	0	2	0			RR
18	Railroad Text	0	2	0	25	0	
19	Railroad R/W	2	2	0			
20	Utility Poles (Cell)	0	5	0			P POLE
21	Utility Easements	3	5	0			
22	Utility Text	0	5	1			
23	Geographic Names	0	3	1			
24	Building Structures	0	0	0			
24	Pools and Text	0	1	0	10	1	
24	Future Site of Structures	2	0	0			STRUCT
24	Existing Structures (exact location and shape unknown)	2	0	0			STRCEX
25	Property Lines/ refuge bdy.	6	6	1	30	1	
26	Cadastral Polygons	6	6	0			
27	Ownership Text	0	6	1			
28	Cemeteries/Text	4	6	0	10	1	
29	Lot Numbers				25	0	
30	Block Numbers				30	0	
31	Addition Names	0	0	0	35	0	
32	Open						
33	Lot Ticks						
34	Lot Lines/Property Lines	6	6	0			
35	Trees/Hedge Rows	0	6	0	AS=1		TREES

36	GPS Monuments	0	5	0	18	23	CONTRL
37	2' Topo Contour						
38	5' Topo Contour	0	7	0			
39	25' Major Topo Contour	0	7	0			
40	X Spot Elevation	0	7	0			
41	FEMA Monuments/Labels	0	3/0	0	18	1	FEMA
42	Quarter Sections						
43	Section Lines	0	5	0			
44	Features	0	2	0			
44	Cell Towers	0	12	0	AS=1		CELTWR
45	Fences (Pattern)	0	8	0	AS=1		FENCE
46	Format/Legend	0	0	0			Limleg Madleg
47	Mass Points	0	7	2			
48	Break Lines	0	7	2			
49	Open						
50	Billboards	0	37	1			BBOARD
51	Sanitary Sewer	0		3			
52	Sanitary Sewer Text						
53	Storm Water Features	0		3			
54	Storm Water Text						
55	Open						
56	Property Address	0	1	0			
57	Text Tag for Buildings	0	1	0	10-20	1	
58	One Way Arrows	1	3	1			
59	Open						
60	Open						
61	Open						
62	Monuments for Setup (point cell)						
63	Open						

ATTACHMENT 16 – REQUIRED DELIVERABLES

Checklist must be submitted at 100% review and with final invoice.

This is a submittal only. **Return this sheet with submittal**

<u>YES</u>	<u>NO</u>	REQUIRED SUBMITTALS TO THE PROJECT ENGINEER
<input type="checkbox"/>	<input type="checkbox"/>	1. Two (2) sets of complete construction drawing prints sized 24" x 36" sealed and marked "ISSUED FOR CONSTRUCTION". Drawings information shall be referenced to Alabama State Plane Coordinate system, NAD1983 Alabama East Zone as described in the <u>Code of Alabama</u> (1975), Section 35-2-1. Surveys shall be tied to a minimum of two accepted GPS monuments or one GPS tie point plus an astronomic observation to determine grid north or GPS Survey.
<input type="checkbox"/>	<input type="checkbox"/>	2. One (1) Micro station digital and One (1) digital file in either .tiff or .pdf format of construction drawings (must be signed and sealed) – sized 11" x 17".
<input type="checkbox"/>	<input type="checkbox"/>	3. Two (2) sets of right-of-way drawing prints sized 24" x 36" sealed and marked "ISSUED FOR CONSTRUCTION". Drawings information shall be referenced to Alabama State Plane Coordinate system. NAD1983 Alabama East Zone
<input type="checkbox"/>	<input type="checkbox"/>	4. One (1) Micro station digital file of right-of-way drawings.
<input type="checkbox"/>	<input type="checkbox"/>	5. Two (2) print sets of 8-1/2" x 11" legal descriptions for right-of-way (REVISED SETS ONLY)
<input type="checkbox"/>	<input type="checkbox"/>	6. One (1) digital text file of legal descriptions for right-of-way (REVISED FILE ONLY)
<input type="checkbox"/>	<input type="checkbox"/>	7. One (1) print copy of Final Construction Cost Estimate.
<input type="checkbox"/>	<input type="checkbox"/>	8. One (1) digital spread sheet file of Final Construction Cost Estimate.
<input type="checkbox"/>	<input type="checkbox"/>	9. Three (3) printed and bound copies of corrected quantity calculations to match Final Bid Quantities.
<input type="checkbox"/>	<input type="checkbox"/>	10. One (1) digital spread sheet file (Excel 2003 format) of Final Bid Quantities.
<input type="checkbox"/>	<input type="checkbox"/>	11. Two (2) print sets of contract specifications.
<input type="checkbox"/>	<input type="checkbox"/>	12. One (1) digital text file of contract specifications.
<input type="checkbox"/>	<input type="checkbox"/>	13. One (1) complete set of signed and sealed calculations.
<input type="checkbox"/>	<input type="checkbox"/>	14. One (1) complete set of all approved permits including Location, Character, and Extent, COE, ADEM, etc.
<input type="checkbox"/>	<input type="checkbox"/>	15. One (1) complete set of all field notes.
<input type="checkbox"/>	<input type="checkbox"/>	16. One (1) copy of digital aerial photography obtained for this PROJECT in (.tif) format, as necessary.
<input type="checkbox"/>	<input type="checkbox"/>	17. Utility Project Notification forms and a list of all utilities that need to be contacted.

_____ Engineer